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On site Engineering
444 7457



Pipe Line
Engineering



Systematic
Maintenance



Hydraulic
Service



Industrial Facility
Transportation

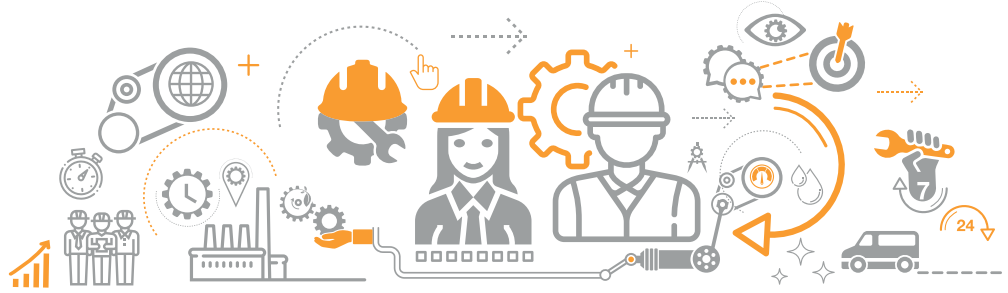


MOTION CONTROL SERVICE CENTER

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Foresight | Rapport | Transformation



HKSM is a leading engineering company that provides comprehensive engineering services to industrial organizations. With its expert technical team, it successfully carries out machine, line, facility installations and commissioning operations, as well as testing, maintenance and troubleshooting services.

HKSM, our company, which undertakes the detailed engineering of hydraulic, pneumatic, mechanical, electrical and electronic systems, meticulously manages all processes from the project design phase to the creation of workflow plans.

Once the project is completed and approved, workflow plans appropriate for the project are created and our technical team manages the project end-to-end. During this process, the necessary engineering, labor, material and equipment supplies are provided and the project is delivered to the customer in working order.

HKSM's areas of expertise include the iron and steel industry, shipbuilding industry and aluminum sectors. In each sector, it aims to provide the highest quality service to its customers and is careful to complete projects on time and within budget.



we produce industrial projects related to pipelines that transfer power in the machine park and ensure the circulation of the fluid that performs the process in the facility.

We manage the processes starting from the design phase to the assembly and delivery of the 3D models, P&ID diagrams, isometric drawings and line routes of the transfer lines in the process according to the scope of the project.

After the efficiency analyses made by taking into account the sector and process data, we provide pipeline installations with our "on-site engineering" approach by using weldless, welded or hybrid piping solutions suitable for the project and put the system into operation. In the pipeline engineering service provided by HKSM, the process starts with the project design of the line and continues with optimum application solutions.

As in pipeline installation, it is also competent in the project design and engineering consultancy of pipelines that will ensure the circulation of hydraulic and other process fluids in the facility in an efficient and norm-compliant manner.

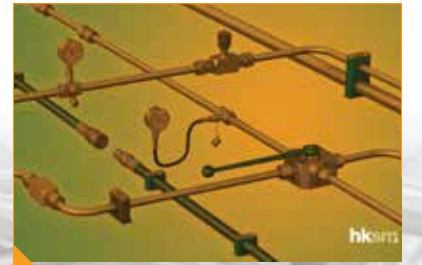


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Projecting:

Before the pipe manufacturing and assembly work begins, the line's route drawings are made. Definitive solutions are offered in the preparation of the material list that will be required during the implementation period. Thanks to the route drawings and simulations, the possibility of the pipes to be manufactured clashing with different equipment, machines and lines is determined.

Thanks to this foresight, the disruptions and time losses that may occur during manufacturing are minimized before the field work even begins. Drawings prepared on platforms such as Autocad and Autocad Plant can be easily adapted to the programs or Navisworks models used by our customers.

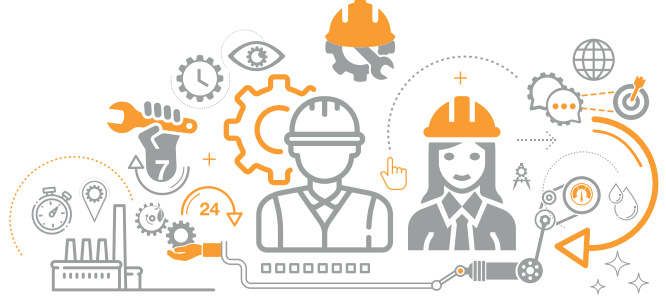


Pipe Installation Techniques

There are mainly three types of pipe joining techniques used in pipeline installation

- Walform Applications
- Flare Flange Technology
- Welded Manufacturing

There are situations where these methods are more advantageous and disadvantageous than each other. In fact, the appropriate method is preferred depending on the fluid to be circulated, the process, the diameters of the pipelines, the current status of the route, and the frequency of the connection elements. After the appropriate method is determined and the optimum system design is made, the products and the machinery and equipment to be used are selected, a team is formed, and the project is implemented according to this data.



By using Walform technology in pipes with an outer diameter of up to 42 mm, it prevents pipes of this diameter from being exposed to welding and prevents welding errors in these small diameters from negatively affecting the system.

All pipes to be used in Walform technology; up to 42 mm, in accordance with DIN 2391 C standard, cold-drawn seamless phosphate coated

EN 10305-4 E235+N (St. 37-4 NBK annealed)
(Heat treated and annealed) with two-sided caps.

This technology is based on the principle of forming the pipe end and mechanically assembling the pipes with the help of nipples, nuts and vibration rings.

It is an ideal solution especially for places where there is vibration, peak and high pressure or where pollution problems that will occur after pipe joining are not desired.

During assembly, utmost care should be taken to prevent foreign substances such as burrs, fiber pieces and dust from remaining inside the pipes and fittings.

Pipe ends should be cut at a right angle of 90 degrees and after cutting, the inner and outer burrs should be removed.

The pipe end forming process should be done with a suitable machine and pipe bending should be done with bending equipment and molds that comply with the standards.

HKSM supplies and sells Gates Tube connection elements. The products are preferred because they are certified and have a long life.



HKSM, which has an on-site engineering approach, has developed MSC (Mobile Service Center) by gathering the main applications required for the pipes to be prepared for assembly during the pipe pre-fabrication process on a bench. With MSC, pipe pre-fabrication processes can be easily carried out from a single point and all requirements are met.



HKSM makes a significant contribution to the establishment of a certain standard in the MSC manufacturing processes, which it produces to make pipe line manufacturing easy and compact in the field.

HKSM meets all the requirements on-site in the pipe pre-fabrication processes with its "Mobile Service Center" and also provides sales and service services for MSC.

+4 Operations in One



Pipe End Shaping:

In order to ensure a healthy installation of the pipes, the pipes are subjected to the pipe end shaping process..



Pipe Bending:

In order to avoid any deformation in the pipe, the bending process is carried out using an electric-hydraulic bending module and metric molds



Pipe End Deburring:

The burrs on the cutting surfaces of the pipes are removed and made ready for other processes.



Pipe Cutting Process:

The first process in pipe pre-manufacturing is the pipe cutting process. The cutting process is done with a circular saw on the machine at a 90° angle.

HKSM uses GS-HYDRO certified machines and connection elements in pipeline installations over 42 mm. With this technology, pipe connections are in the mechanical connection category as in walform technology and weld-free connections can be made.

GS-Hydro, the leading company in weld-free line piping solutions on a global scale, is the distributor of HKSM in the Romanian, Bulgarian and Greek markets, primarily in Turkey.

Thermal stresses that will occur due to welding, rust in the welding area, post-welding tests, cleaning of residues such as burrs and slag in welding areas, non-destructive inspections, etc. are automatically prevented.

The main application of the technology is pipe connections in high-pressure hydraulic systems where leakage is important. In addition, it can meet the needs of the entire market with many advantages provided by the technology over welded manufacturing, such as superior cleaning, ease of service, prefabrication, fast installation or zero fire hazard, as requested by the customer.

The original GS-HYDRO Pipe System consists of a three-flange system that enables the assembly of pipe systems with working pressures of 10 to 1,000 bar and pipe diameters of 6 to 600 mm without welding.

**GS-90°**

Flare Flange System for Low Pressure Applications

**GS-37°**

Flare Flange System for High Pressure Applications



GS-Retaing Ring System For Very High Pressure Applications

FLARE FLANGE TEKNOLOJİSİ



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GS-Flange Connection Technology is approved by many classification societies around the world:

ABS	American Bureau of Shipping
DNV-GL	Det Norske Veritas / Germanischer
LRS	Lloyd's Register of Shipping
BV	Bureau Veritas
RINA	Registro Italiano Navale
MRS	Russia Maritime Register of Shipping
NKK	Nippon Kaji Kyokai
CCS	China Classification Society
KR	Korean Register



What are the advantages of using GS-Hydro Flaring Machine?

- Exemption from Cleaning and Inspections: Since no welding is done, no subsequent cleaning of the welds, X-rays or other inspections are required.
- Sealing: GS-Hydro pipe connections provide reliable sealing even in high-pressure applications. This minimizes the risk of leakage in the system and increases operational reliability.
- Easy Installation: GS-Hydro pipe connections offer quick and easy installation. They reduce installation time and labor costs.
- Flexibility: GS-Hydro connections allow for more precise pipe bending. This enables more complex pipelines to be laid and provides flexibility in system design.
- High Quality and Durability: GS-Hydro products are manufactured to a high quality and made of durable materials. This ensures a long-lasting and reliable system.
- Low Maintenance Requirement: Reliable sealing and durability result in low maintenance requirements for GS-Hydro connections, thus reducing operating costs.
- Cleanliness and Aesthetics: GS-Hydro's pipe connections are a cleaner manufacturing method than welding, allowing for faster results in the flushing process after manufacturing and minimizing the risk of contamination in the system.
- Fewer Moving Parts: GS-Hydro connections have fewer moving parts. This requires less part handling during assembly and reduces potential failure points.

Standardization: What are the Industrial Standards Complied with for GS-Hydro's Pipe Connections?



HKSM carries out the welding process with certified personnel according to the welding method to be applied after preparing welding procedures in accordance with the requirements of the project and performing the necessary tests in pipeline processes.

Especially in hydraulic and pneumatic systems; hot steel drawn seamless pipes in accordance with EN10210/1-2 S355J2H or EN 10297 E355 (St 52) DIN 2448 norm are used in sizes larger than 42 mm. The assembly of these pipes is only done with TIG welding and the delivery processes are carried out after NDT controls are performed after the process.

HKSM, which operates with an on-site engineering approach in industrial pipe welding processes, has also completed its certification in this subject and the entire process is carried out with certified engineers and welding personnel. Since this process also covers the field of steel construction, these processes are also carried out with certified engineers, assembly and welding personnel.



We also perform pickling and flushing services, especially in hydraulic and lubrication lines that require testing and cleaning after installation, and perform pipe interior cleaning by performing on-site measurements and tests, and document all of these processes with online measurement and test reports.

The pipeline engineering service provided by HKSM starts with project design and ends with pre-manufacturing, assembly, testing and commissioning processes.

HKSM provides services with the principle of on-site engineering in the design, installation and commissioning processes of hydraulic systems. It provides services and products by meeting the demands and expectations in the processes of troubleshooting, periodic maintenance, preventive maintenance and predictive maintenance in hydraulic systems.

HKSM has received the ISO 9001 certificate in order to provide international service within the scope of hydraulic service and continues its work within the framework of the global standards required by this certificate.



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HKSM's services within the scope of hydraulic service;

- Flushing Applications
- Pickling Applications
- Filtration Applications
- Hydraulic Hose Manufacturing & Assembly Applications
- Valve, Cylinder, Battery, Pump Repair & Maintenance Applications
- Hydraulic component supply and assembly

The most important factor in the trouble-free operation of hydraulic systems is the internal cleanliness of the line where fluid circulation takes place. 80% of the failures in hydraulic systems are due to the pollution that occurs over time in the pipeline through which the hydraulic fluid passes.

A human hair is 80 microns, the smallest particle that the eye can see is 25 microns, while a foreign substance of 20 microns or even 10 microns in systems with proportional valves is the cause of failure. In addition, we also provide maintenance and service services related to pickling & flushing processes for pipelines in order for the systems to be put into operation without any problems and to operate stably afterwards.

In the installed systems, the existing components are removed from the flow and the pipeline is connected to the "Flushing Unit" and the fluid is circulated in two directions using speed, temperature and turbulent flow factors on the inner surface of the pipeline and the inner surface of the line is cleaned of solid particles.

In order for the oil to be circulated in a closed volume and particles to be cleaned, the oil must create friction in the pipe. The friction created by the oil in the pipe is also achieved by the oil flow accelerating and turning from laminar flow to turbulent flow. In order to increase the flow rate, an oil flow rate of at least 4-6 times the pipe diameter in the lines where flushing is performed is circulated. The higher the oil flow rate, the shorter the flushing period.

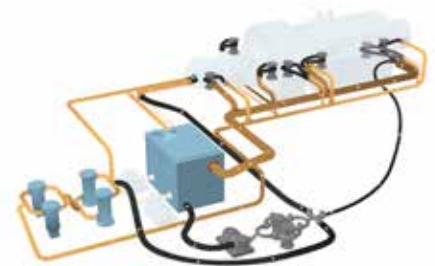
The flushing process is carried out in two steps.

In the first step, a sufficiently large unit is adapted to the system from the outside and the oil cleaning is brought to the desired norms. In the second step, the cleaning is done using the system's own pump and tank features.

The flow rate and pressure required to create turbulent flow are calculated according to the pipe diameter and the length of the line. Loops are created in a way that no diameter decrease occurs and the flushing process is started. Online measurement report is obtained with connections from minimes fittings connected to the line. When the desired value is reached, the flushing oil in the system is discharged with the help of nitrogen gas and the system is delivered.

**Equipment Used.**

- Flushing unit;
- Filters (3,6,10,20 microns)
- Collectors
- Hydraulic hoses for loop
- Online Particle measuring device



The duration of the flushing process varies according to the length of the line and the amount of particles in the system. If the capacity of the unit to be used is selected appropriately, correct looping and the line length is made in several sections, the durations can be controlled.

Otherwise, the flushing process will extend unpredictably and the result may not be obtained. After the desired values are reached in the flushing process, the flushing circuits are removed and the system is brought into working position. During this time, the disassembly and assembly processes must be carried out meticulously.

Flush+

Combining its manufacturing, installation and service experience in heavy industrial hydraulic systems with the practical demands of the field, HKSM has produced the “flushing” machine Flush Plus, which will significantly prevent malfunctions for hydraulic systems.



With Flush+ hydraulic pipeline internal washing machine ;

- Ease of use and maintenance
- Adaptability to all types of field and environmental conditions
- Resistance to climate conditions
- Adjustable flow rate
- Variable filtration level and easy replacement

With Flush+ hydraulic pipeline internal washing machine ;

- Ease of use and maintenance
- Adaptability to all types of field and environmental conditions
- Resistance to climate conditions
- Adjustable flow rate
- Variable filtration level and easy replacement

Technical Specifications:

Length: 6100 mm / Width: 2450 mm / Height: 2600 mm Total Weight: 8000 kg (Without oil filling) Pump Capacity: 1000 lt/min (can be increased by 500lt)
Filter Capacity: 3 series filters (20micron, 10micron 3 or 5micron)
Pressure Port: DN100 (4 outlets)
Return Port: DN125 (6 outlets)
Tank Capacity: 3000 lt

Maximum Flushing Pressure:

40 Bar Flushing Pump Type: Screw Pump Maximum Test Pressure:

320 Bar Maximum Heating Capacity: 9 Kw

System Installed Power: 77 Kw (3x 22 Kw + 11 Kw)

Operator Voltage: 400 V 50 Hz

Hydraulic systems require clean and efficient pipes to function properly. Over time or after welding, hydraulic pipes can become contaminated with rust, lime and other residues that can negatively affect system performance. The effective way to remove these impurities that will have a detrimental effect on the system from hydraulic pipes is pickling. Pickling is a process used to remove negativities such as rust and lime from the inner surface of hydraulic pipes.

Why is Pickling Important in Hydraulic Pipes

Pickling is important to apply to hydraulic pipes as it helps to remove impurities that can negatively affect system performance. Rust and scale can accumulate on the inner surface of hydraulic pipes, causing reduced flow rates, increased pressure drop and ultimately system failure. Pickling helps to remove this impurity, allowing hydraulic systems to operate at peak efficiency.

The pickling process includes the following steps :

Preparation: Before pickling, hydraulic pipes must be thoroughly cleaned to remove any loose debris or contaminants. This is done using the high pressure water method.

Acid Solution: A pickling solution is prepared using a mixture of acid and water. The concentration and type of acid depend on the specific application as well as the type of metal being pickled.

Acid Wash: Hydraulic pipes are pressurized with pickling solution for a certain period of time to wash their internal surfaces. The length of time depends on the type of metal being pickled and the severity of the contamination.

Rinsing: After acid washing, pipes must be thoroughly rinsed to remove any remaining acid or contamination. This is done using the high pressure water method.

Neutralization: After rinsing, pipes must be neutralized to prevent any residual acid from corroding the pipes. After pickling, hydraulic pipes are also cleaned in terms of particles with our flushing machines.

Pickling is an effective way to remove contaminants from hydraulic pipes, ensuring that hydraulic systems operate at their highest efficiency. By following proper pickling procedures, you can help extend the life of your hydraulic system and avoid costly repairs or replacements.





Hydraulic Test Station

HKSM; conducts field service, assembly, commissioning, periodic maintenance processes with its certified professional team and on-site engineering approach in accordance with EU standards.

It established the "Hydraulic Test Station" system to produce solutions to customer requests from a single source and to obtain efficient results in pump, cylinder, battery, valve repair and maintenance processes by spreading HKSM quality to the entire service.

The test system can test all hydraulic pumps, cylinders and valves up to 355 cc, and can perform performance tests thanks to its 90 kW installed power.

In this test system, which provides service in EU norms, the rotation direction and speed control can be made and the test conditions can be adjusted according to product features and customer requests. The values such as flow, pressure, speed and temperature that occur during the process are recorded and the results are presented in a graphic or table form.



The most important factor in the trouble-free operation of hydraulic systems is the internal cleanliness of the line where fluid circulation takes place. The experiences of component manufacturers and users and research reports on the subject show that 80 percent of the causes of failure are due to the contamination of the oil used in the system.

No working system is completely "clean". While a human hair is 80 microns and the smallest particle that the eye can see is 25 microns, a foreign object as small as 20 microns or even 10 microns in systems with proportional valves can cause a malfunction.

The main sources of pollution;

- The system itself; cylinder, hoses, hydraulic motors, pipes and pumps etc.)
- Environmental operating conditions and ambient conditions
- Manufacturing and assembly stages
- Maintenance and repair operations
- Deterioration of the oil by losing its properties over time
- Other external factors (bearing seals, sealing elements)

Consequences of Pollution;

- Production losses
 - Component replacement costs
 - Oil replacement costs
- It results in high downtime rates.



Types of Pollution: Particulate, Water,

Particulate Pollution

The particles that cause serious damage in the system are in the micrometer range. In fluid systems, solid particles vary in size, shape, form and quantity. The most damaging pollutant sizes in hydraulic systems are between 6 and 14 microns and cannot be seen with the naked eye..



POC⁺ Particle Oil Counter



In hydraulic systems, the hydraulic oil that transmits power and protects the system gets dirty and loses its properties over time due to the nature of the process and material or external effects. Contamination or deterioration in the oil causes wear of hydraulic elements and instability of the mechanism.

A very important part of the failures that occur in hydraulic systems are related to the contamination or loss of properties of the hydraulic oil. The condition of the hydraulic oil can be learned by making a quick and easy measurement with the "Particle Oil Counter".

The data required to develop foresight is obtained thanks to the measurement made with the Particle Oil Counter. Depending on the condition of the contamination, necessary actions such as filtration or detailed oil analysis are planned.

What is the "Particle Oil Counter"?

In a closed circuit flow system, it is of vital importance for the system to detect and control the contamination in the hydraulic oil before it causes any deterioration or sudden stop.

With the measurement made quickly and easily with the "Particle Oil Counter", sufficient data is obtained to develop foresight. Depending on the state of the contamination, necessary actions such as filtration or detailed oil analysis are planned.

"Particle Oil Counter", thanks to its specially developed software and compact structure resistant to impact and dust, measures hydraulic oil with optical method in different sectors and under difficult conditions and performs particle counting.

"Particle Oil Counter" is a portable measurement tool that records the data obtained from measurements in fast or long-term modes into the system in accordance with ISO4406-NAS1638 standards, can send it to a defined e-mail or back it up to an external disk.



SYSTEMATIC MAINTENANCE



Systematic maintenance is a critical component of any company's equipment management program. It involves a planned and structured approach to maintaining equipment to ensure it operates at peak performance, minimize downtime, and extend the life of the equipment.

The Importance of Systematic Maintenance

Systematic maintenance is a fundamental aspect of asset management in any organization. It keeps equipment operating at peak performance, minimizes downtime, and extends the life of the equipment.

Benefits of Systematic Maintenance:

- Increased equipment reliability: By performing regular maintenance activities, you reduce the likelihood of equipment failure and ensure that your equipment is always in good working order.
- Reduced downtime: Downtime can be costly for organizations in terms of both lost productivity and repair costs. Systematic maintenance helps reduce downtime by identifying potential problems before they become serious issues.
- Improved safety: Regular maintenance activities help identify and correct potential safety hazards before they harm personnel.
- Lower repair costs: By performing regular maintenance activities, you reduce the likelihood of major repairs that can be expensive.

Longer equipment life: Regular maintenance activities help extend the life of equipment by reducing the need for costly replacements.

Types of Maintenance

There are several types of maintenance that you should know about. Each type has a specific purpose and is used in different situations. Understanding the different types of maintenance will help you determine the type that is best for your equipment.

Preventive Maintenance: This type of maintenance involves performing regular maintenance activities, such as inspections, cleaning, and lubrication, to prevent equipment failure. **Predictive Maintenance:** This type of maintenance involves using data and analytics to predict when maintenance will be needed and executing maintenance activities accordingly. **Corrective Maintenance:** This type of maintenance involves performing repairs after equipment failure has occurred.

Maintenance Programs and Procedures

A well-planned maintenance program is the key to effective systematic maintenance. It is necessary to establish the steps for creating a maintenance program and the procedures to be followed during maintenance activities.

SYSTEMATIC MAINTENANCE

Maintenance Schedules

Determine maintenance requirements: Identify the maintenance activities that need to be performed for each piece of equipment.

Develop a maintenance plan: Once you have determined the maintenance activities that need to be performed, a plan is developed for when each activity will be performed.

Assign tasks and responsibilities: Ensure that each maintenance activity is assigned to a specific person or team and that they understand their responsibilities.

Implement the maintenance plan: Once your maintenance program is in place, it will be implemented effectively.

Maintenance procedures:

Inspection: Regular inspections are essential to catch potential problems before they become serious issues.

Cleanliness: Keeping equipment clean helps reduce the likelihood of equipment failure and improves overall performance.

Lubrication: Proper lubrication is essential to keep equipment operating smoothly and efficiently.

Adjustment: Regular adjustments help keep equipment operating at peak performance

Tools, Training and Continuous Improvement

It is very important to have the right tools, training and processes to ensure that maintenance activities are carried out effectively. Studies are conducted on the tools and equipment required for maintenance activities, how personnel training should be done and the importance of continuous improvement.

Maintenance Tools and Equipment:

Common maintenance tools: These include items like wrenches, pliers, and screwdrivers.

Special maintenance equipment: Depending on the type of equipment you are servicing, you may need special tools like a torque wrench or multimeter

Education:

Develop a training program: Create a training program that covers the different types of maintenance activities and the procedures that must be followed for each. Ensure that all personnel involved in maintenance activities receive the necessary training.

Provide ongoing training: As new equipment is introduced or procedures change, personnel receive ongoing training to keep their skills current.

-Train personnel on maintenance procedures.

-Regularly review and update training

Continuous improvement:

Review and analyze maintenance activities: Regularly review maintenance activities to identify areas where improvements can be made.

Implement improvements: Once improvements are identified, they are implemented to ensure maintenance activities are carried out more effectively.

Monitor results: Monitor the results of all implemented changes to ensure they have the desired effect

By following these steps, your organization will create an effective systematic maintenance program that will help ensure your equipment is operating at peak performance and lasting as long as possible. By implementing a systematic maintenance program, your organization will benefit from increased equipment reliability, reduced downtime, and improved safety. We provide these services by creating a maintenance program that works for your organization and performing On-Site Engineering





The quality and features of the hydraulic hose alone do not mean anything, the hydraulic hose and fittings are a whole. In addition to the compatibility of the hydraulic hose and its head, it is necessary to combine them at the prescribed values in hose crimping presses through machines specially produced for the brand.

Headed hose internal cleaning

In hydraulic systems, contamination becomes one of the biggest problems of the system over time. Therefore, the particles resulting from the cutting of the hoses used in hydraulic systems must be cleaned after the pressing stage. As HKSM, we show the necessary sensitivity to this issue thanks to the gun sponge spraying system.

Gates hose fittings;

- With standard Tuffcoat coating, it is 5 times superior to SAE standards in corrosion resistance in salt spray tests.
- Provides absolute sealing with the possibility of peeling-free assembly
- The single-piece Megacrimp heads used in wire-braided hoses start with a circular section and remain so thanks to the equal power distribution with the patented C structure, locks, bites the wire.

Test and wash

With our test machine developed by HKTm Design and R&D department, whose reports we can print, static and dynamic tests can be performed up to 1000 bar after hydraulic hoses are pressed. After the test, the inside of the hose can be washed by circulating oil.

What does flexibility bring?

Gates hoses are 50% more flexible than SAE standards, and in addition to easy installation, they also provide savings of up to 47% in the total hose length used.

HOSE MANUFACTURING PROCCES



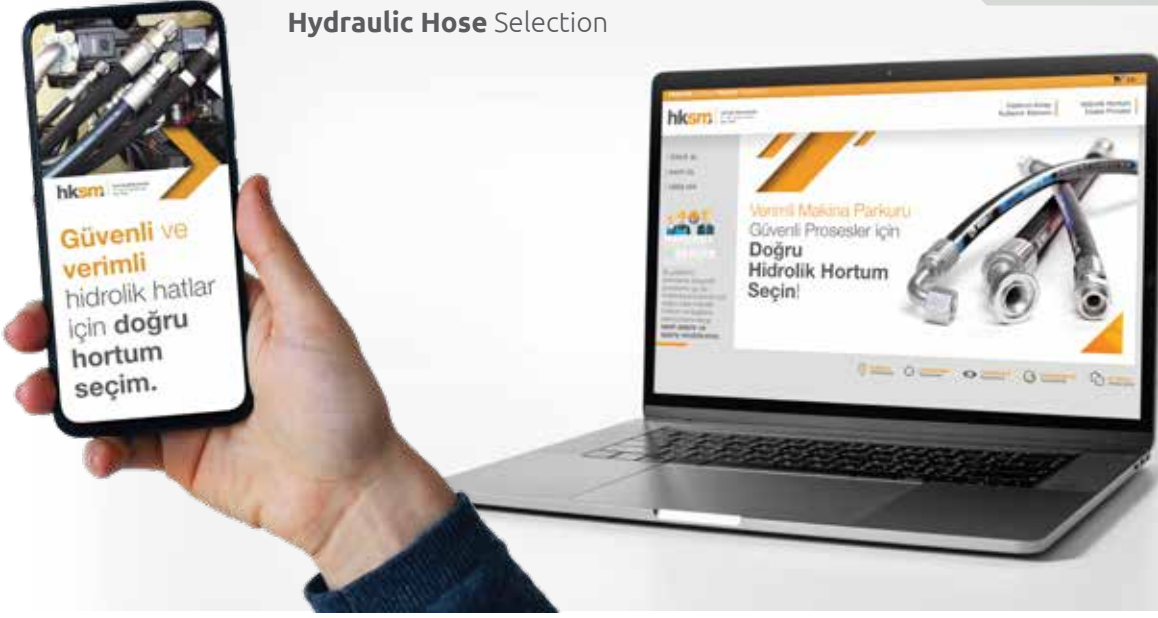
- The order form received from the customer is sent to the warehouse.
- The net length of the hose is calculated by taking into account the connection elements.
- The hydraulic hose is determined in accordance with the operating conditions such as pressure, temperature, cycle time.
- The hose is cut in a way that does not leave burrs.
- The internal cleaning of the hydraulic hose is the most important issue in manufacturing. The internal cleaning must be done so that the rubber parts formed during the hose cutting process do not damage the hydraulic system in which it will be used. During manufacturing, the hose is cleaned by passing it through a special sponge that is 2-3 mm larger than the inner diameter of the hose with the help of the pressurized air of the hose cleaning gun.
- The relevant hose series in the memory of the digital press is selected.
- The relevant mold is placed in the press according to the orientation of the machine.
- The hose heads are mounted on the previously cut and cleaned hose.
- The pressing process is carried out in the hydraulic hose press.
- Measurement after pressing is one of the most critical stages. The area where the pressing is done is measured with a caliper and compared with Gates' reference values. In case of a problem in the measurements, the calibration is done again with Gates' guide.
- Immediately after the pressing and measurement control processes, both ends of the hose are closed with plastic plugs to prevent foreign matter from entering.
- Each hydraulic hose that is manufactured is numbered. The hose is monitored by HKSM. Thanks to this tracking number, it becomes possible to quickly supply the same product with the same quality in case of any malfunctions or changes that may occur later, without the need for a field survey.
- The completed product is shipped to the relevant department to be delivered to the customer ready for use.



Hose
Manufacturing
Video

FLEX⁺

Hydraulic Hose Selection



Choosing the right hose for a hydraulic system is a very difficult issue as it requires serious work experience and product knowledge. For this purpose, HKSM created a "Hydraulic Hose Selection Program" that works in a web environment.

A list of suitable options can be created by proceeding step by step through this platform, by combining the appropriate and correct length hose for the specific conditions with the necessary connection elements. Hydraulic hoses can be selected according to different criteria from the list and offers can be requested.

With this software, suitable hydraulic hose options can be easily created, the most suitable one can be selected correctly, technical drawings can be drawn and relevant choices can be recorded.

By registering to the program and recording all the requested hoses through the system with the hose code, ERP number and technical drawings for the purchasing process of the relevant projects, our customers will have the ability to have this hose made no matter where they are in the world.



Hydraulic Hose
Selection Platform



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