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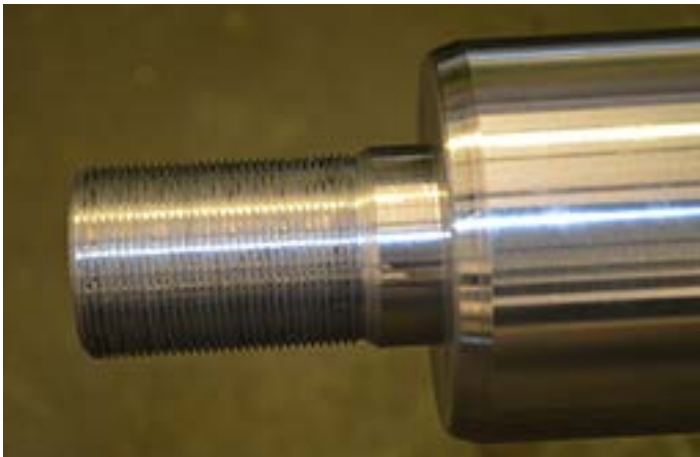
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VS: Machining

VS-V001 Tapping threads

VS-V011 Cutting threads



Technical information

Technical information	



VS-V022 Deformation of pipes



Securing a screw connection by deforming of the pipe and making a collar for the screw cap. A special sealing ring is fitted on the front.

This processing method is an alternative to the weld coupling.

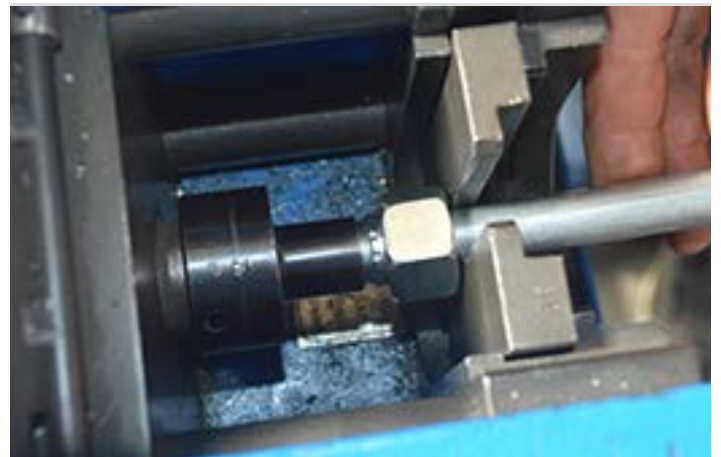
Identification according to S034 is also possible.

Technical information

Pipe diameter	6x1.5/8x1.5/10x1.5/12x1.5/12x2/12x3/15x1.5/16x2/18x2/20x2/20x3/20x3.5/22x2 22x3/25x3/25x4/28x2.5/30x3/30x4/35x3/38x4/38x5/38x6/42x3/42x4
Max. pressure	Dependent on wall thickness and steel quality (250–700 bar)



VS-V023 Preinstalling a screw cap/cutting ring on pipes



Preinstalling a screw connection by pressing a cutting ring onto the pipe. This method ensures that the cutting ring cuts into the pipe properly without forcing the thread into the screw cap.

Identification according to S034 is also possible.

Technical information

Pipe diameter	6L / 6S / 8L / 8S / 10L / 10S / 12L / 12S / 14S / 15L / 16S / 18L / 20S / 22L / 25S / 28L / 30S / 35L / 38S / 42L



VS-V031 Turning work



Our machine fleet has ten conventional lathes and eight CNC lathes that we use to process shafts and sprockets. We have a great deal of knowledge and experience, so we are able to assist you in many different ways.

Technical information

Maximum shaft diameter	100mm through the chuck



VS-V041 Sawing



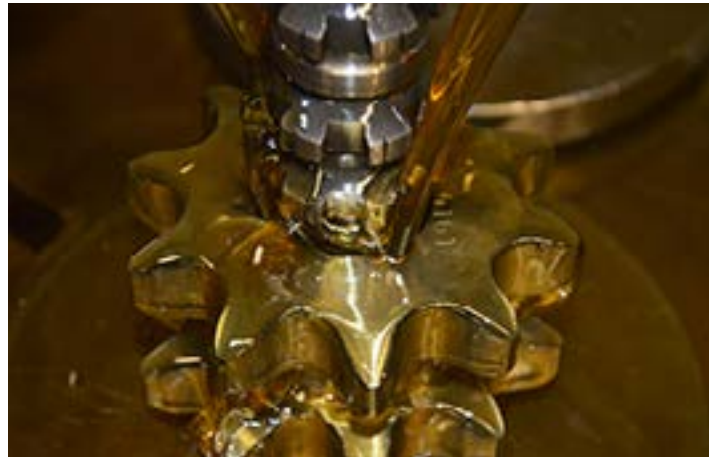
Sawing a variety of materials.
For shafts and rods, sawing can take place on a semi-automatic sawing machine.
For repetitive work, these saws have an automatic material feed.

Technical information

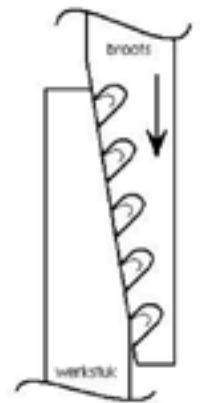
Max. diameter	400mm
Max. hardness	Hardox 60



VS-V051 Broaching profiles



The total length of bush to be broached depends on the rod.
The most common dimensions are available.
Most broach lengths are a max. of 100mm.



Profile rods are available for:

20 x 17T12	20 x 16T6	16/32T21	13/4T27
28 x 25T15	25 x 21T6	16/32T23	
30 x 27T16	36 x 32T8		8 x 42 x 36T6
32 x 28T17	38 x 32T8	12/24T14	
35 x 31T18			30T13
40 x 36T20	16/32T9	11/8T6	40T18
60 x 55T28	16/32T11	13/8T6	55T26
	16/32T13	13/8T21	60T28
	16/32T15	13/4T6	



VS-V052 Hobbing profiles



We can mill the following dimensions.
The maximum spline length that can be milled is 400mm.

Technical information								
15 x 12T8	50 x 45T24	11/8T6			32T11	45T16	55T20	68T26
17 x 14T9	52 x 47T25				32T14	45T21	55T26	68T32
18 x 15T10	55 x 50T26	13/8T6		20T8	35T12	47T17	58T22	70T26
20 x 17T12	58 x 53T27	13/8T21		22T7	35T16	47T22	58T28	70T34
22 x 19T13	60 x 55T28	13/4T6		22T9	37T13	48T18	60T22	72T27
25 x 22T14		13/4T20		25T11	37T17	48T22	60T28	72T34
28 x 25T15	16/32T9	13/4T27		28T8	38T14	50T18	62T23	75T28
30 x 27T16	16/32T11	8 x 42 x 36T6		28T11	40T14	50T24	62T30	75T36
32 x 28T17	16/32T13			30T10	40T18	52T19	65T24	78T30
35 x 31T18	16/32T15	15T6		30T13	42T15	52T24	65T31	78T38
38 x 34T19	16/32T21	16T6						
40 x 36T21	16/32T23	17T7						
45 x 41T22		18T7						
48 x 44T23	12/24T14	20T6						



VS-V061 Milling



Conventional milling of a wide variety of materials.

Technical information



VS-V062 Key slot milling



The milling of an external key slot with a maximum width of 28mm.
The maximum key slot length is 1000mm.

Technical information

Technical information	



VS-V063 Key slot cutting



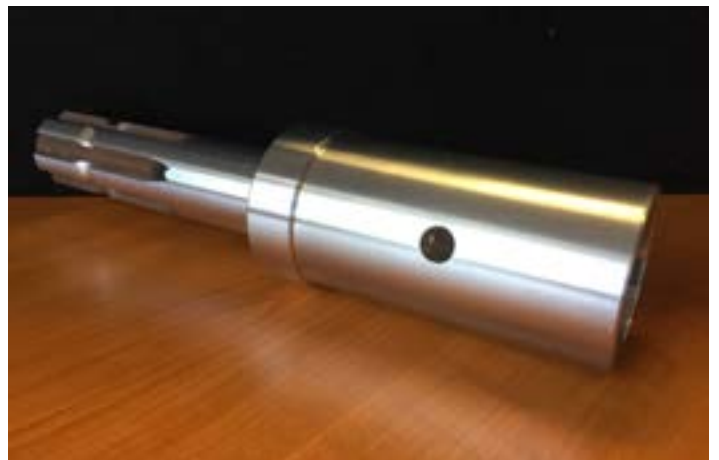
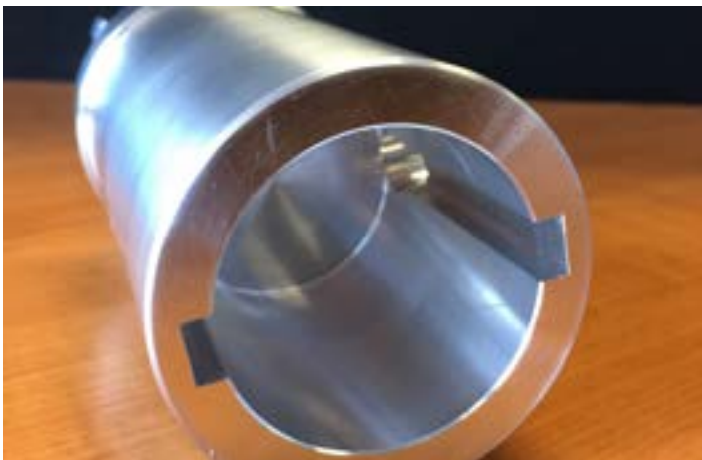
Cutting a key slot for an internal key, maximum width 25mm along a length of 80mm.

Producing keyway	Keyway width	2,4	3	3,2	4	3/16	1/4	3/8	5	6	7	8	10	12	14	16	18	22	25
	Length bus max in mm	25	30	30	30	60	45	24-60	16-80	20-100	20-60	20-100	20-130	20-130	20-120	20-120	36-80	44-120	40-100

Technical information



VS-V064 Keyway in blind hole



The keyway can be produced in a blind hole. The keyway width is possible in 6 mm, 8 mm, and 10 mm. The maximum length of the keyway is 50 mm.

Technical information

Technical information	



VS-V071 Welding cylinders



For welding cylinders, we use certified welders whose skills are assessed every six months. Our welding methods are: MIG/MAG and TIG.

Technical information

Technical information	



VS-V072 Spraying cylinders



We use the wet paint method in our spraying process. Static spraying is also an option.

Technical information

Primer sprayed

Colours in any desired RAL colour



SL: Hoses

SL-S001 Reeling hydraulic hoses



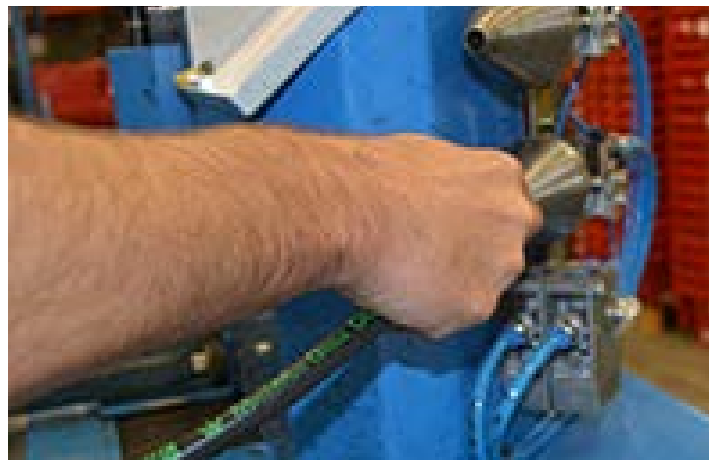
We transfer bulk deliveries of hydraulic hoses onto reels in practical lengths.

Technical information

Minimum	3/16"
Maximum	3/4"
Lengths	25–40–50 meters



SL-S021 Pressing hydraulic hoses



Pressing hydraulic hoses with various column and diameter options.
The hose is purged and protected as standard to ensure cleanliness.

Technical information

Minimum diameter	0.5"
Maximum diameter	3"
Number of layers	Six steel layers



SL-S031 Sticker label around hoses



If you wish, we can apply a label to the hose. Plastic tape is affixed around the label to protect it.

Technical information

Label	Label with item number and production date available
	Other markings are also available



SL-S032 Number/logo on heat-shrink tubing around hydraulic hoses



We can also print the number and any logo on heat-shrink tubing and fit it around the hose.

Technical information



SL-S033 Stamping a number in ferrules



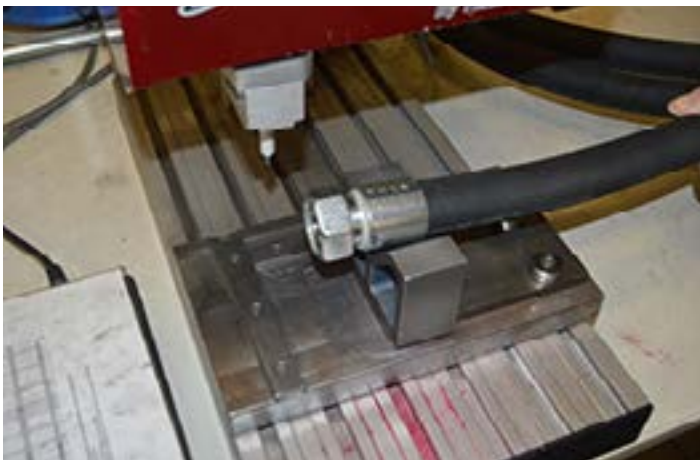
It is possible to stamp a number into the swage ferrule.
This is done while the hose is being pressed, by one of the swage blocks which contains the code.

Technical information

Technical information	



SL-S034 Engraving a number in swage ferrules

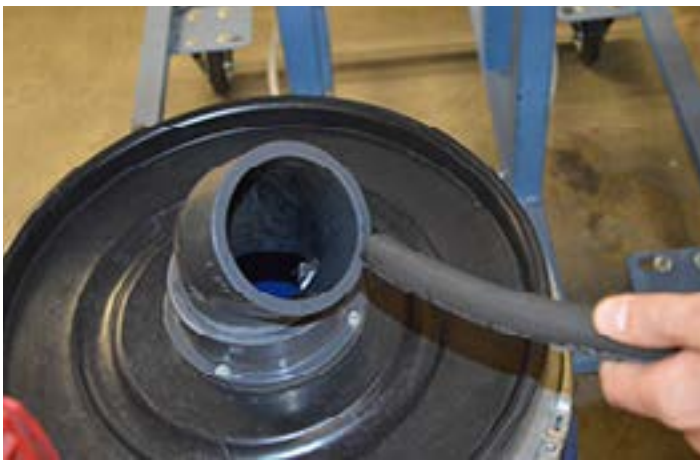


Engraving swage ferrules.

Technical information



SL-S041 Cleaning hoses with UltraClean



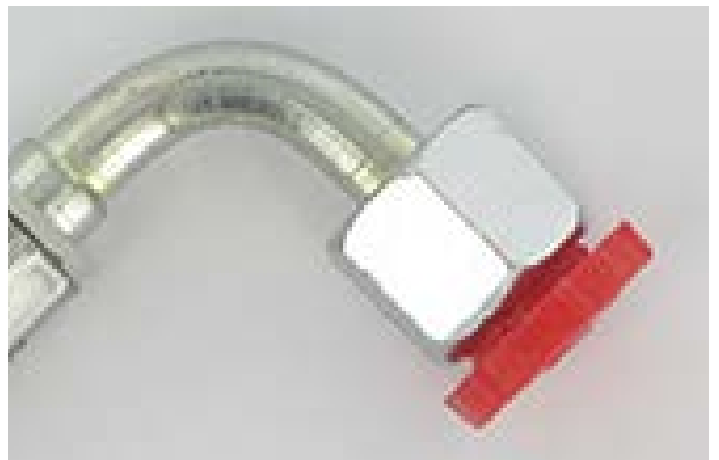
SL-S042 Cleaning hoses in accordance with NAS6

UltraClean cleaning of hoses in accordance with the specifications of NAS6. Then select one of the sealing methods to protect NAS6.

Technical information



SL-S043 Capping hoses with plastic caps



Once the hose has been cleaned, it is capped or bagged.

Technical information

Technical information	



SL-S044 Fitting hoses with plastic bags or plastic caps



Technical information

Technical information	



SL-S045 Fitting hoses with plastic film for spraying entire machines



If you wish to spray paint your vehicle a specific colour after the hydraulic hoses have been fitted, we can protect the hoses using film.

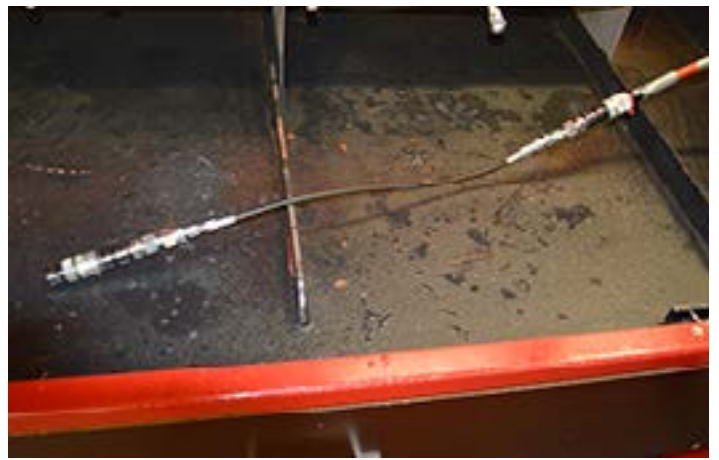
This film is easy to remove once the machine has been sprayed.

Technical information

Technical information	



SL-S051 Pressure testing hydraulic hoses



For certifying hydraulic hoses, we have access to a high pressure bench with a maximum pressure of 2500 bar.

Technical information

Technical information	



SL-S052 Hydraulic hose pressure test with certificate

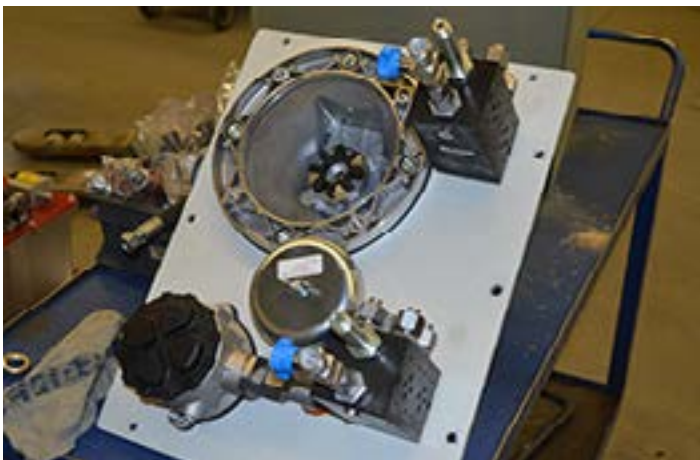


The results are printed as a document.

Technical information	



SL-S061 Putting together hydraulic kits



For putting together and assembling various hydraulic components, such as valve blocks with piping or power packs.

Technical information

Technical information	



HY: Hydraulics

HY-H001 Assembling hydraulic valve blocks



The PVG valve from Danfoss is fitted and adjusted in the workshop based on your configuration.

Technical information



HY-H002 Hydraulic valve modification



Modifying existing valves by replacing a piston or fitting a pilot-operated check valve, for example.

Technical information

Technical information	



HY-H011 Configuring/assembling hydraulic units



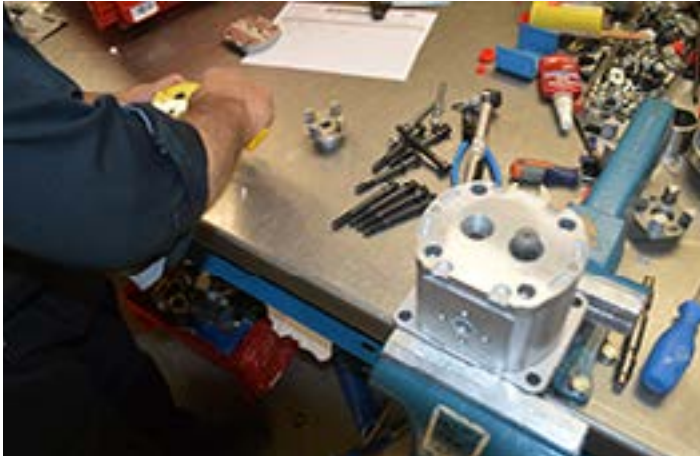
Assembling a MPP (Mini Power Pack). This can be done to any specification.

Technical information

Technical information	



HY-H021 Repairing/modifying hydraulic pumps/motors



In the workshop, multiple pumps can be fitted and the direction of rotation can also be switched. Repairs are also carried out if possible.

Technical information

Technical information	



HY-H031 Cylinder assembly



In our cylinder factory, we can assemble a wide variety of cylinder types, including special orders and cylinders designed using the configurator.

Technical information

Technical information	



HY-H032 Cylinder repair



Because every cylinder consists of a pipe and rod, we are able to recondition almost all cylinders, as we have lengths of the rod material in stock. You will first be quoted a price for the reconditioning.

Technical information

Technical information	



HY-H041 Topping up accumulators



We can fill accumulators with nitrogen to a pressure of 200 bar.

Technical information

Technical information	



HY-H052 Repairing hydraulic wheel motors (SAMPO)

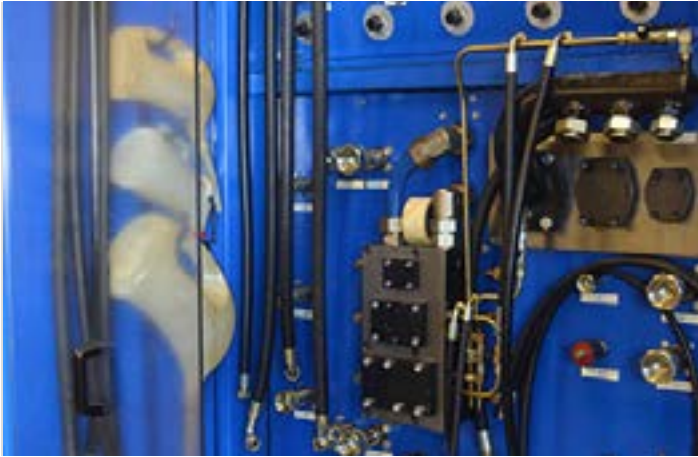


Our engineers have been trained by Sampo to recondition or modify the Black Bruin motor.

Technical information



HY-H053 Repairing and testing various hydraulic components



In our workshop, we have access to an advanced hydraulic test bench. This allows us to carry out testing on CETOP valves and other valves such as PVG. The bench also provides the most common electrical signals from black/white to proportional. Through an external PTO connection, we can drive pumps with an output of up to 75 KW.

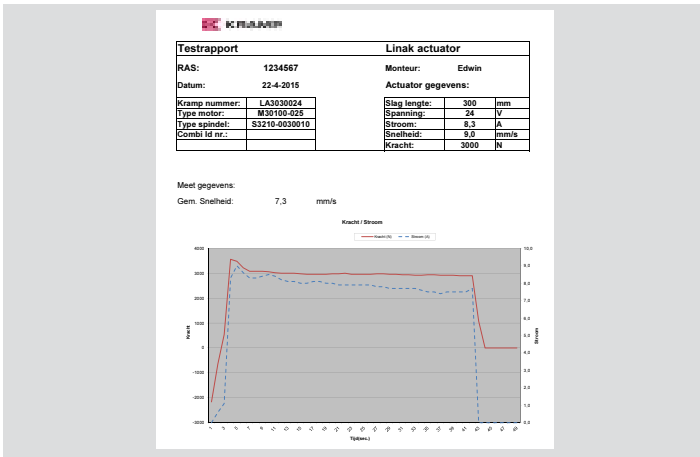
Technical information

Technical information	



EL: Electronics

EL-E001 Warranty/repairing and testing of (LINAK) linear actuators

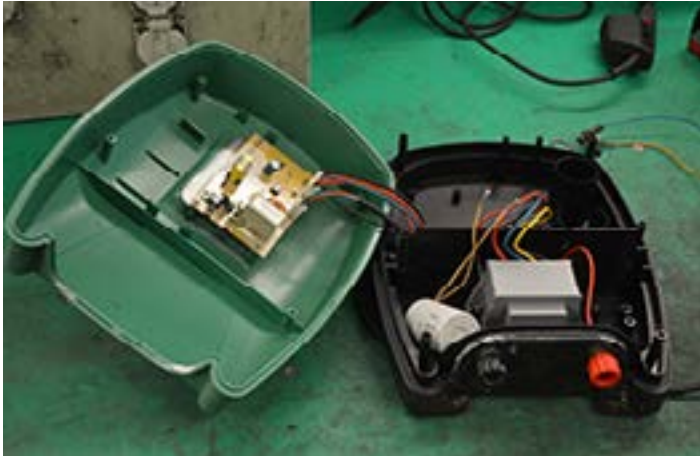


Thanks to a number of different testing options, we are able to test the output of actuators.

Technical information	



EL-E021 Warranty/repairing electrical equipment



We repair, for example, electrical field fencing equipment and Siku toys in-house, where possible.

Technical information

Technical information	



EL-E041 Calibrating and repairing (TOPCON) lasers



Construction lasers must be calibrated once a year.
We have the right tools to carry out this work.

Technical information

Technical information	



EL-E051 Warranty assessment for camera systems



If there is a problem with a camera system, we are able to test the system. The result is used as the basis for the warranty assessment.

Technical information

Technical information	



EL-E061 Warranty assessment for starter motors

EL-E062 Warranty assessment for alternators



Testing alternators and starter motors for warranty assessments.

Technical information

Technical information	



EL-E101 Assembly and wiring of control cabinets

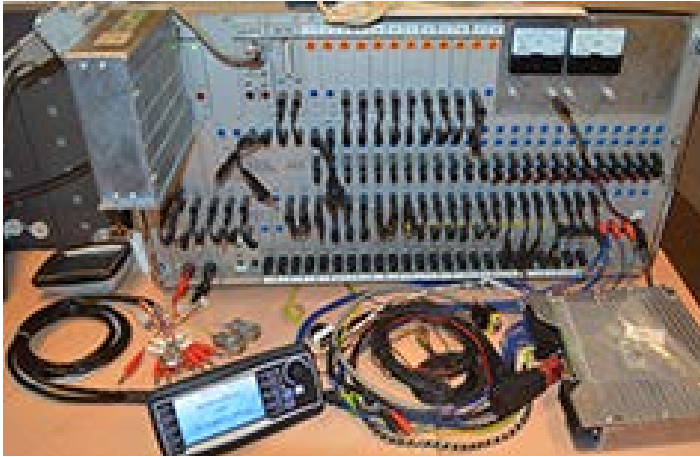


In our electronics workshop we build switch boxes with various connections and voltages. We handle everything from relays to PLC technology.

Technical information



EL-E111 Programming PLC/controllers



Our programmers can program different PLCs, including: Danfoss +1, B&R, STW, Siemens, Wachendorff and Unitronics.

Technical information

Technical information	



EL-E121 Assembly of wiring harnesses for various machines



We can put together cable harnesses and switch boxes.

Technical information



EL-E131 Assembly and programming of remote controls



We can program radio remote controls, for example by setting a second hand control for a specific function.

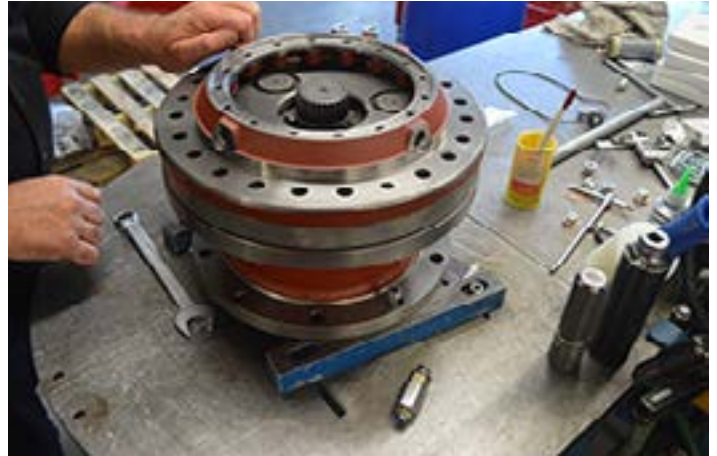
Technical information

Technical information	



AS: Drive shafts

AS-A001 Assembly of drive shafts



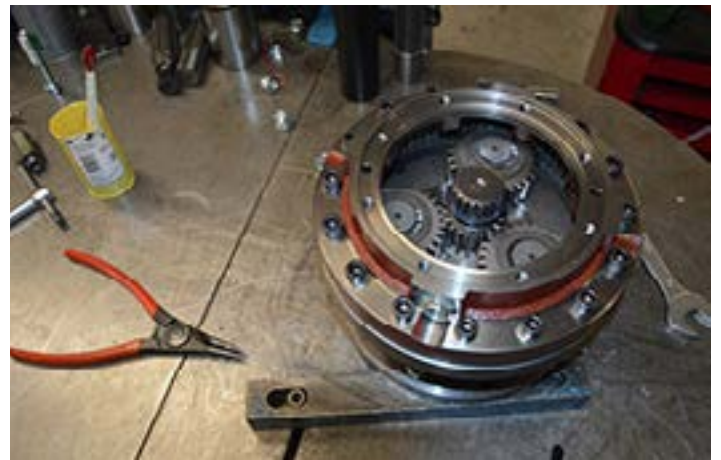
In the workshop, we can put together a planetary gearbox from different stages and sections.

Technical information

Technical information	



AS-A002 Assembly/repairing planetary drives



Technical information

Technical information	



AS-A011 Reconditioning of PTOs



The assembly of PTOs including pipe and protection.

Technical information



AS-A021 Repair/assembly of (ELBE) cardan shafts



If a drive shaft rotates at more than 1000 rpm, it must be balanced.
We can carry out this work on shafts up to 1200mm in length.

Technical information

Technical information	



AS-A031 Checking and adjusting friction clutches



KRAMP

Prüfbericht Überlastkupplung Seite 1/1

Kunden-Nr.: _____ Firma: _____
 Straße: _____ PLZ/Ort: _____
 Telefon: _____ Ansprechpartner: _____

Landmaschinen-
 Hersteller: _____ Firma: _____
 Straße: _____ PLZ/Ort: _____
 Telefon: _____ Ansprechpartner: _____

Überlastkupplung:
 Hersteller: _____
 Typ: _____
 Sollwert (Hersteller): _____ Nm
 Bestellnummer: _____

Messwertermittlung:
 Alle sechs Messungen müssen nebeneinander durchgeführt werden!

	Messungen						berechneter Mittelwert	Sollwert (Hersteller)
	1	2	3	4	5	6		
Erstprüfung Ermittlung Sollwert (Drehmoment (Nm))								
Abweichung vom Sollwert:	<input type="checkbox"/> ja <input type="checkbox"/> nein							
Gründe für die Abweichung:	_____ _____ _____							
Maßnahmen zur Fehlerbeseitigung:	_____ _____ _____							
Erstprüfung Ermittlung Sollwert (Drehmoment (Nm))								

The checking and adjusting of friction clutches. A measurement report is also included.

Technical information	



PN: Pneumatics

PN-P011 Warranty/repair of (FINI) compressors



Technical information

Technical information	



PN-P021 Repairing pneumatic tools



You will also be quoted a price first for repairing pneumatic tools and cylinders.

Technical information

Technical information	



PN-P022 Repairing pneumatic valves and cylinders



We can recondition most pneumatic cylinders thanks to the large range of parts we have at our disposal.

Technical information



MM: Slurry parts

MM-M001 Assembly of slurry hoses



Technical information

Technical information	



MM-M011 Assembly of slurry pump systems



We put together slurry pump systems, for example by fitting a stone catcher, in our own workshop.

Technical information

Technical information	



MM-M012 Repairing slurry pumps



Slurry pumps and vacuum pumps are disassembled and subject to a warranty assessment.

Technical information

Technical information	



MM-M021 Assembly of slurry gate valves



Gate valves and multi-way systems are assembled in the workshop.

Technical information

Technical information	



PR: Projects

PR-R001 Mechatronic projects



The above photos relate to project engineering and prototyping. First, a system is built and documented in our own workshop, then we can provide you with parts via set deliveries.

Technical information	



PR-R011 Co-engineering for various machines and jobs



Extensive support options for hydraulic, electronic and construction-related issues.
With co-engineering, we generate added value by sharing our expertise and work with you to find a solution.

Technical information



PR-R021 Software development for systems on a range of PLC/controller platforms



We have in-house programmers who can program applications on a range of platforms.

Technical information



DI: Miscellaneous

DI-D011 Calibrating moisture meters

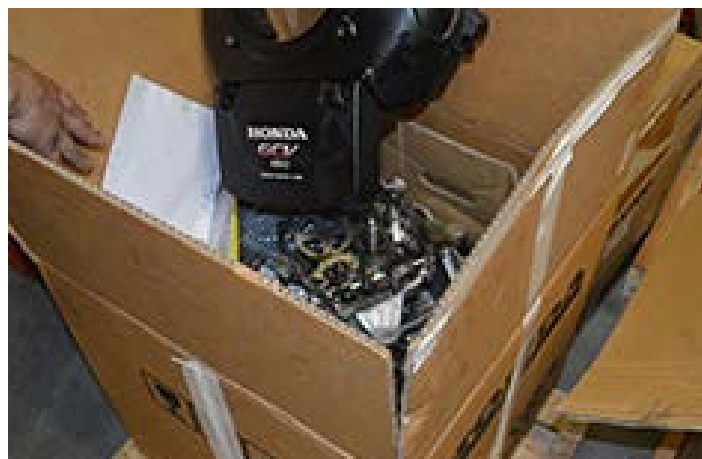


We are able to calibrate your moisture meter in our workshop.

Technical information



DI-D031 Warranty/repairing petrol motors (Honda, B&S, Kawasaki)



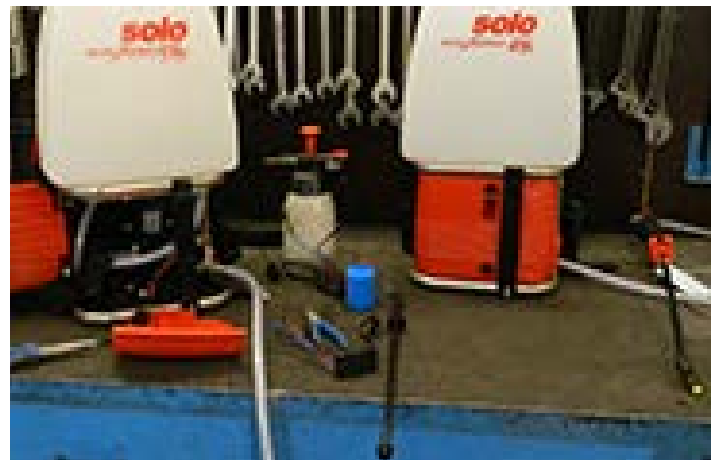
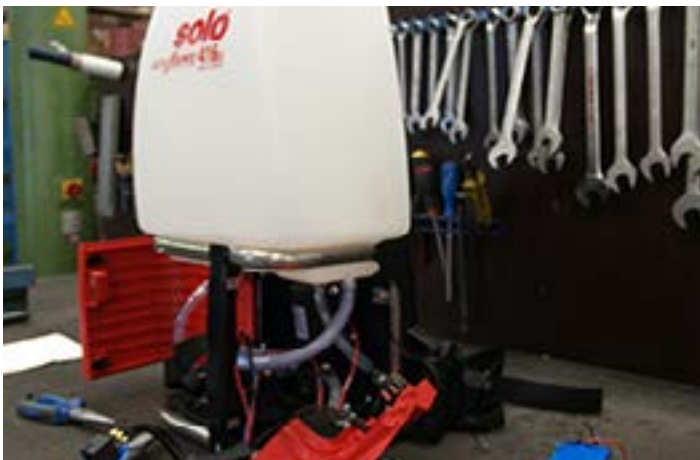
We perform warranty assessments for Honda, Kawasaki and B&S motors.
We can also carry out small repairs for you.

Technical information

Technical information	



DI-D041 Repair sprayers



In the workshop we repair various pressure sprayers brands.

Technical information

Technical information	

