



Ihr Partner

für gebrauchte Maschinen und Anlagen

Specification

Technical Specifications & Requirements

> Transmission production line <

Plant Germany



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1. SALES CONTENT

All photos are only for orientation. An on-site visit is required!

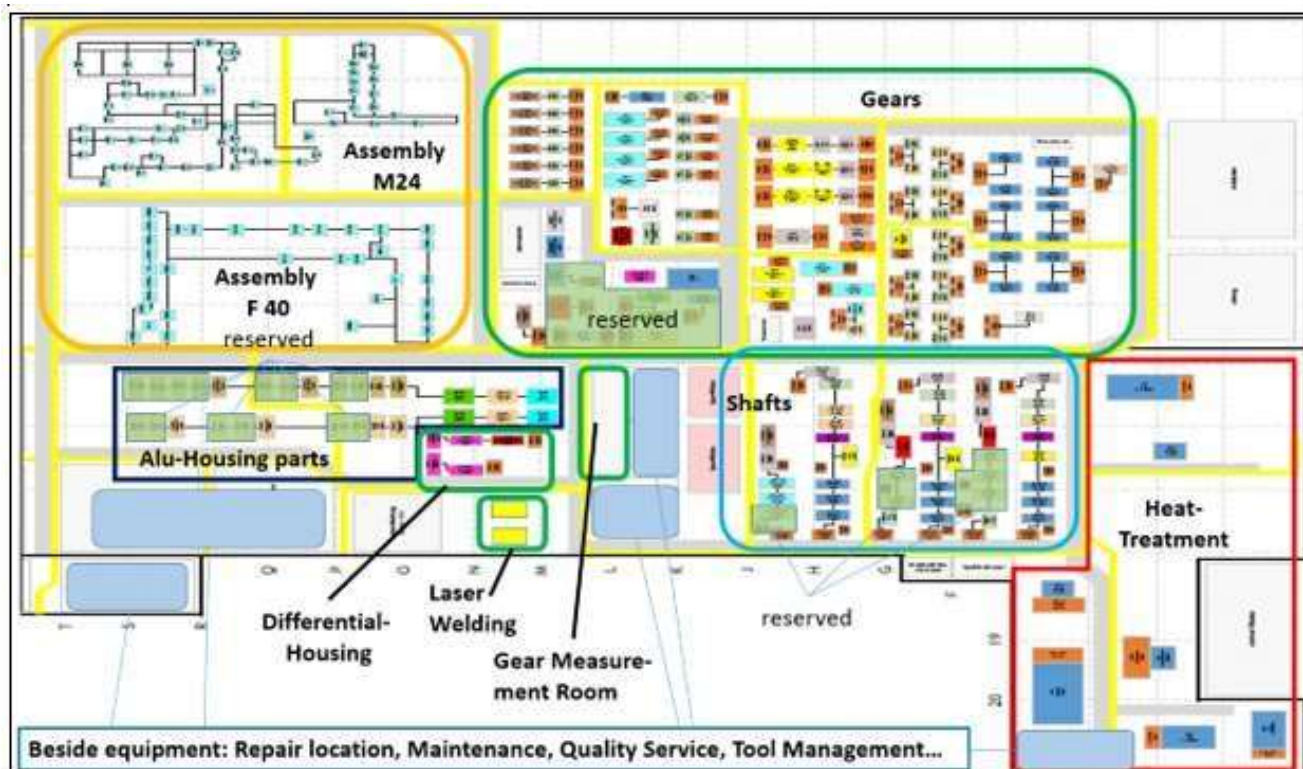
The photos of the machine tool show the external view and inside the clamping & the tool situation.

The listed assets belong to:

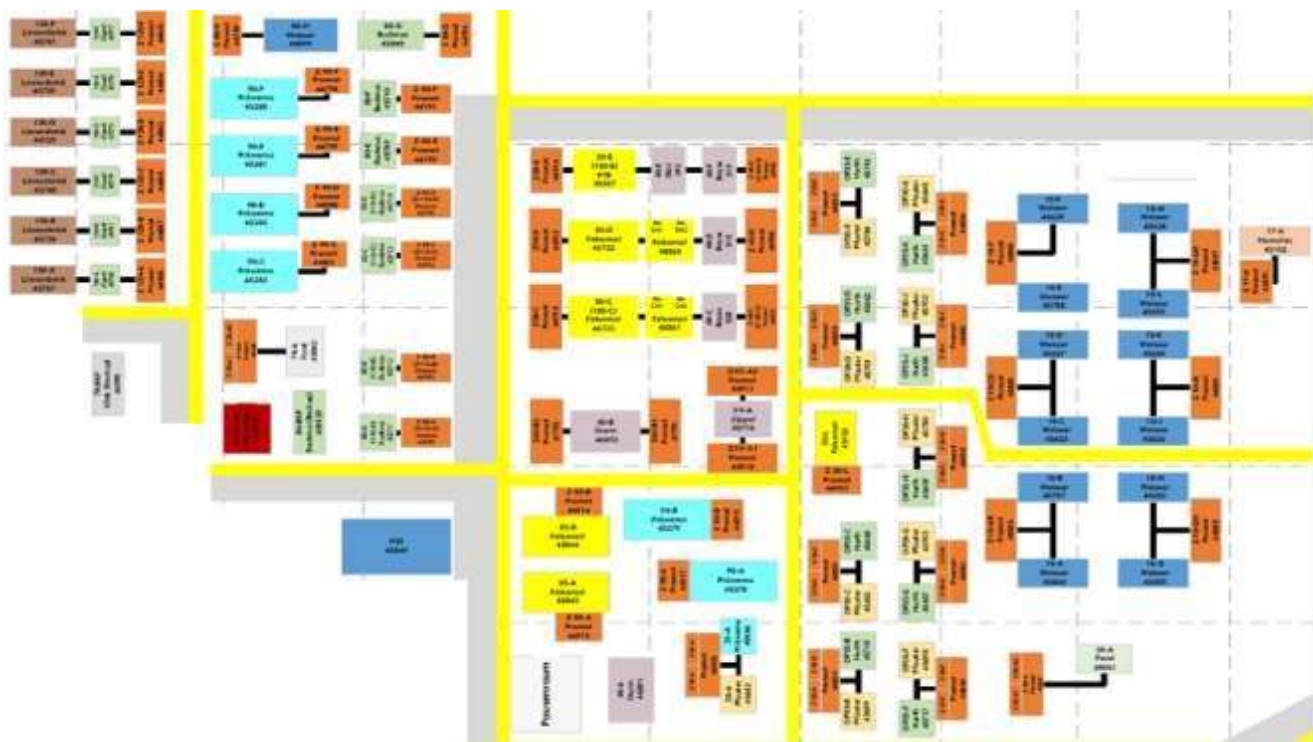
Asset location: **Plant - Germany**

- Manufactured Product: F 40 and M 24 – Transmission
- Machine park:
 - 108 Machine Tool for production
 - 32 Washing Machines for production
 - 5 Welding Machines for production
 - 10 Noise Testing Machines
 - 4 Heat Treatment Systems
 - 3 Shot Peening Machines
 - 84 Loading- and Unloading Cells
 - 2 pcs. Assembly lines with test stands
- Measurement & Maintenance areas
-
- **Capacity: 240.000 unit/a means 60 s/unit**

Block Layout



1.1. Gear lines



1.1.1 OP 10/15 Soft Turning; 6 pcs. left hand and 6 pcs. right hand Weisser Turning Machines

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	MachineSupplier	Build in:
Gears	OP 10/15	Soft Turning	Univertor AD-90 L/R	70045602	1770 55 253	Weisser	2001
				70045603	1770 55 252		2001
				70045604	1770 55 251		2002
				70045605	1770 55 244		2001
				70045623	1770 55 249		2001
				70045624	1770 55 245		2001
				00456257	1770 55 246		2002
				70045626	1770 55 247		2001
				70045627	1770 55 248		2001
				70045628	1770 55 250		2001
				70045787	1770 55 397		2002
				70045788	1770 55 398		2002



1.1.2 OP 17 Drilling, 1 pcs. Nomotec

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Gears	OP 17	Drilling	-	70045102	1770 55 253	Nomotec	2001



1.1.3 Op 20_70 Soft- and Hart Broaching, 2 pcs. Forst and 1 pcs. Karl Klink

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Gears	OP 20	Soft Broaching	RISH 10 x 1000 x 500 M	700045041	M 230 295	Forst	2016
	OP 70	Hard Broaching	RISH 10 x 1000 x 500 M	700045042	M 230 296		
			RISH 16.1000.500 H	70044098	3186	Karl Klink	2001



1.1.4 OP 30_35 Hobbing and Chamfering and Soft Shaving, 10 pcs. Pfauter, 9 pcs. Hurth, 1 pcs. Felsomat, 1 pcs. Präwema

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	MachineSupplier	Build in:
Gears	OP 30	Hobbing	P 210	70045642	28 716	Pfauter	2002
				70045648	28 707		
				70045653	28 708		
				70045698	28 709		
				70045699	28 710		
				70045700	28 711		
				70045701	28 712		
				70045702	28 713		
				70045703	28 714		
				70045704	28 715		
	OP 30/33	Hobbing + Chamfering	FHC 180	700045103	715 081	Felsomat	2016
	OP 33/35	Chamfering + Soft Shaving	ZSE 160 T	70045657	A 0114	Hurth	2001
				70045658	A 0119		
				70045659	A 0113		
				70045660	A 0104		
				70045661	A 0112		
				70045662	A 0118		
				70045716	A 0115		
				70045717	A 0116		
				70045718	A 0 117	Now for SALE	
	OP 35	Chamfering	Synchroform SLV-R1	70045666	006 904	Präwema	2001

GREEN: new / additional machines for sale





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1.1.5 OP 40_100 Washing for Soft- a. Hard Welding, 1 pcs. Sturm Baskets full with gears 1 pcs. Sturm for Ground Trollies, 1 pcs, Sturm KK 1x, 3 pcs Byess, 2 pcs. Dürr

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	MachineSupplier	Build in:
Gears	OP 40/100	Gear Washing	WA 495 / 65 G	70000518	944 157	Byess	1994
			WA 495 / 100 G	70000519	945 159	Byess	1994
			WA 495 / 65 G	70000520	946 158	Byess	1994
Dogbody		Washing of Dogbody	NG 22 321	70600193	72 540	Dürr-Ecoclean	2007
		Washing of Dogbody	Throughput machine 144 kVA	700046091	9 516 392	Sturm	2016
all Gears	-	Washing of basket layers	Throughput machine 151 kVA	700046092	9 516 393	Sturm	2016
-	-	Washing of floor rollers	ZD-2500-RT	70045776	ZD 389	Zippel	2002





1.1.6 OP50/105 u. Hard Welding, 1 pcs. EB PTR, 2 pcs. LASER Felsomat, 2 pcs. LASER Arnold

Typ of Workpiece	OP-Nb.:	Operation	Mach.-Typ	Inv.-Nb.:	Commission-Nb.:	MachineSupplier	Build in:
Gears Dogbodies	OP 50/105	LASER-Welding	Laser- WeldingMachine	70045728	20 263	Arnold	2002
				70045729			
		Washing Dogbodies	NG 22 320	70600192	72 540	Dürr Ecoclean	2007
		ElectrobeamWelding	EBW P4 / 6-60 PLC	70038257	304 18 2554	PTR	1988
		LASER - Welding	FLW 180	700046722	116 001	NOW for SALE Felsomat	2016
		Automation	-	700048060	216 103		
		LASER - Welding	FLW 180	700046723	116 002		
		Automation	-	700048061	216 104		

GREEN: new / additional machines for sale



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1.1.7 OP 80_85_110 Hard Turning _Grinding, Felsomat 2 pcs., Buderus 6x without . KSS, Buderus 1 pcs with. KSS, central KSS

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	MachineSupplier	Build in:
Gears	OP 80	Hardturning/-Grinding	A-I-8TR-LA	700045040	529 410	Buderus	2016
			CNC 335	70045709	8828		2002
				70045710	8829		
		Hard Turning	Univertor A-90L	70044099	177055254	Weisser	2001
	OP 85	Pre Hardturning	FTC 180	700045043	715 079	Felsomat	2016
				700045044	716 080		
	OP 110	Hardturning/-Grinding	CNC 335	70045711	8830	Buderus	2002
				70045712	8831		
				70045713	8832		
				70045714	8833		
	Backup			70600129	8933		2006
	-	Filter Device for Buderus-Machines	HV 80	70026473	203 050	Mann & Hummel	2003





1.1.8 Op 90 HGF Gear Honing, -Grinding, 6 pcs. Präwema and 1pcs. Gleason Hurth

Typ of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Ring Gear	Reserve Machine	Gear Grinding	ZSW 380	70045783	H0101	Gleason-Hurth	2002
		Automation	EPL	70045783	A1080001	Promot	
		Filter Unit	Low Peasure Belt Filter-Type	70045950	10654	Hoffmann	



1.1.9 OP 120_130 6 pcs. End Washing Zippel, 5 pcs. Noise Testing CM Digt and 1 pcs. Noistesting Linnenbrink

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Gears	OP 120	End-Washing	ZD-2500-RT	70045775	ZD-390	Zippel	2002
				70045777	ZD-383		
				70045778	ZD-384		
				70045779	ZD-385		
				70045780	ZD-386		
				70045781	ZD-387		
	OP 130	Noise Testing	Type A-206	70045737	A 206/1	CM-Digit	2001
			Automation	700048740	-	Linnenbrink	2016
			Type A-206	70045738	A 206/2	CM-Digit	2001
			Automation	700048741	-	Linnenbrink	2016
			Type A-206	70045739	A 206/3	CM-Digit	2001
			Automation	700048742	-	Linnenbrink	2016
			Type A-206	70045740	A 206/4	CM-Digit	2001
			Automation	700048743	-	Linnenbrink	2016
			Type A-206	70045741	A 206/5	CM-Digit	2001
			Automation	700048744	-	Linnenbrink	2016
			-	700044729	5798.1	Linnenbrink	2016





1.1.10 29 pcs Loading and Unloading Cells in the Gear Area

Type of Workpiece	OP-Nb.:	Operation	Automation Cell	Inv.-Nb.:	Commission-Nb.:	MachineSupplier	Build in:
Gears	OP 10/15	Softturning	Twin-type	700044885	2021-197.001-P	Promot	2016
			Twin-type	700044886	2021-198.001-P		
			Twin-type	700044887	2021-199.001-P		
			Twin-type	700044888	2021-200.001-P		
			Twin-type	700044889	2021-201.001-P		
			Single-type	700044890	2021-202.001-P		
	OP 17	Drilling	Single-type	700044891	2021-203.001-P		
	OP20	Broaching	Twin-type	700044892	2021-204.001-P		
	OP 30+35	Hobbing & Shaving	Twin-type	700044893	2021-205.001-P		
			Twin-type	700044894	2021-206.001-P		
			Twin-type	700044895	2021-207.001-P		
			Twin-type	700044896	2021-208.001-P		
			Twin-type	700044897	2021-209.001-P		
			Twin-type	700044898	2021-210.001-P		
			Twin-type	700044899	2021-211.001-P		
			Twin-type	700044900	2021-212.001-P		
			Twin-type	700044901	2021-213.001-P		
	OP 30+35	Hobbing & Champfering	Single-type	700044902	2021-214.001-P		
	OP 30/35	Hobbing & Shaving	Single-type	700044903	2021-215.001-P		



	OP 40	Washing Softend before Welding	Triple-type	700044904	2021-216.001-P	
			Triple-type	700044905	2021-218.001-P	
			Single-type	700044906	2021-217.001-P	
			Single-type	700044910	2021-219.001-P	
			Single-type	700044911	2021-220.001-P	
			Twin-type	700047791	2021-221.001-P	
			Twin-type	700047792	2021-222.001-P	
		After Welding	Triple-type	700044912	2021-271.001-P	
			Triple-type	700044913	2021-272.001-P	
			Single-type	700044916	2021-273.001-P	

Typ of Workpiece	OP-Nb.:	Operation	Automation Cell	Inv.-Nb.:	Commission-Nb.:	MachineSupplier	Build in:
Gears	OP 85	Pre Hard Turning	Single-type	700044914	2021-224.001-P	Promot	2016
			Single-type	700044915	2021-225.001-P		
	OP 90	Powerhonen	Single-type	700044917	2021-226.001-P		
			Single-type	700044918	2021-227.001-P		
			Single-type	700044798	2021-239.001-P		
			Single-type	700044799	2021-240.001-P		
			Single-type	700044800	2021-241.001-P		
			Single-type	700044801	2021-242.001-P		
			Single-type	700044801	2021-242.001-P		
	OP 70	Hard Broaching	Twin-type	700044788	2021-229.001-P		
	OP 80 / 110	Hard Turning / Grinding	Single-type	700044789	2021-230.001-P		
			Single-type	700044790	2021-231.001-P		
			Single-type	700044791	2021-232.001-P		
			Single-type	700044792	2021-233.001-P		
			Single-type	700044793	2021-234.001-P		
			Single-type	700044794	2021-235.001-P		
			Single-type	700044795	2021-236.001-P		
			Single-type	700044796	2021-237.001-P		
	OP 120 / 130	Washing + Noisetesting	Single-type	700044802	2021-243.001-P		
			Twin-type	700044803	2021-244.001-P		
			Twin-type	700044804	2021-245.001-P		
			Twin-type	700044805	2021-246.001-P		
			Twin-type	700044806	2021-247.001-P		
			Twin-type	700044807	2021-248.001-P		

GREEN: new / additional machines for sale



Single Cell



Twin Cell

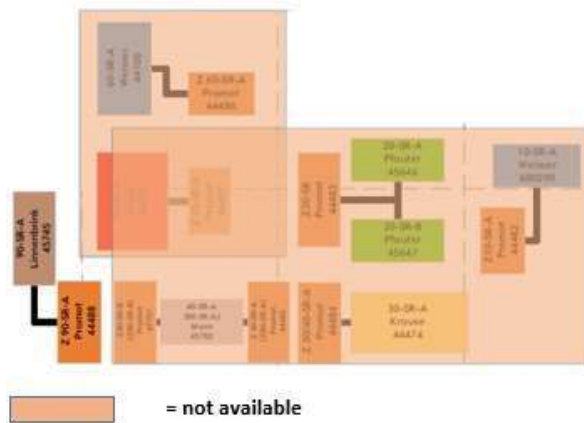


Twin Cell with Turning station



Triple Cell

1.1.11 Ring Gear Line - OP10-90 Machine Tool 6 pcs.; Washing Machine 1 pcs.; Noise Testing 1 pcs.



Bauteilart	OP-Nr.:	Operation	Masch.-Type	Inv.-Number	Kommisions-Nr.:	Hersteller	Year
	90	Geräuschprüfen	-	70045745	5767.01	CM-Digit	2002
		Be- u. Entladezelle	Single Type	700044488	2021-256.001-P	Promot	2016

Table color markings: (ORANGE & YELLOW are not for sale!)



Operation	Equipment	Inv.-Nb.:	Commission-Nb.:	Supplier	Build in:/ Rebulid in:
Shaving Tool Sharpening	Profile Grinding Machine RSB 18 CN	70045664	SU 2068	Samputensili	2002
Shaving Tool Sharpening	Profile Grinding Machine SRS 400	70021266	18010	Hurth	?
Shaving Tool Sharpening	Profile Grinding Machine SRS 400	70032355	21742	Hurth	?
Shaving Tool Sharpening	Profile Grinding Machine SRS 402	70033150	21755	Hurth	?
	Grinding Machine	70019524	?	Schaudt	?



Gear Measurement Machines

Operation	Equipment	Inv.-Nb.:	Commission-Nb.:	Supplier	Build in:/ Rebuild in:
Measurement and Testing	Gear Measurement Machine PNC 30	70036955	B 4600	Klingelnberg	1991

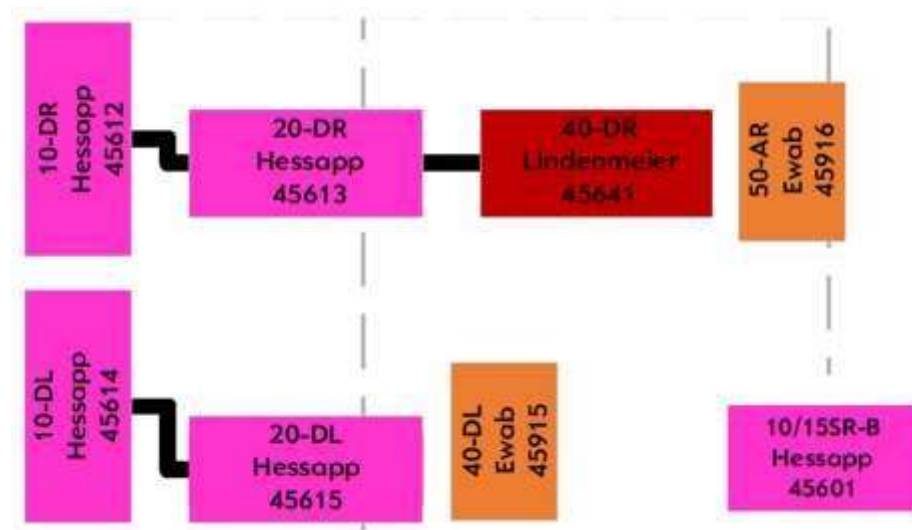


Moistest and Runout Checking Machines

Operation	Equipment	Inv.-Nb.:	Commission-Nb.:	Supplier	Build in:/ Rebuild in:
Run Out Checking	Vertical Center Support	70028532	?	Mahr	?



1.1.13 Differential Housing Line F40 - OP 10 -50 Turning Machine 4 pcs.; Machine Tool 1 pcs.; Noise Testing Machine 1 pcs.

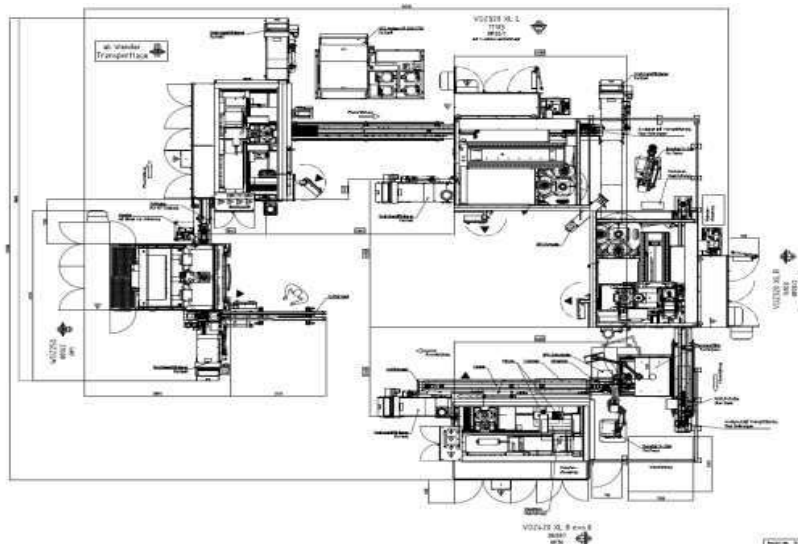


Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	MachineSupplier	Build in:
	30	General Machining	RTM-4ST	70045641	87520	Lindenmeier	2001
Back up for Ring Gear	10/15	Preturning	DVT 250	70045601	A.1000535	Hessapp	2002

Table color markings: (ORANGE & YELLOW are not for sale!)



1.1.14 Differential Housing Line M24 - OP 10 -50 Turning Machine 5 pcs.; Robot 2 psc.; ConveyorAutomation

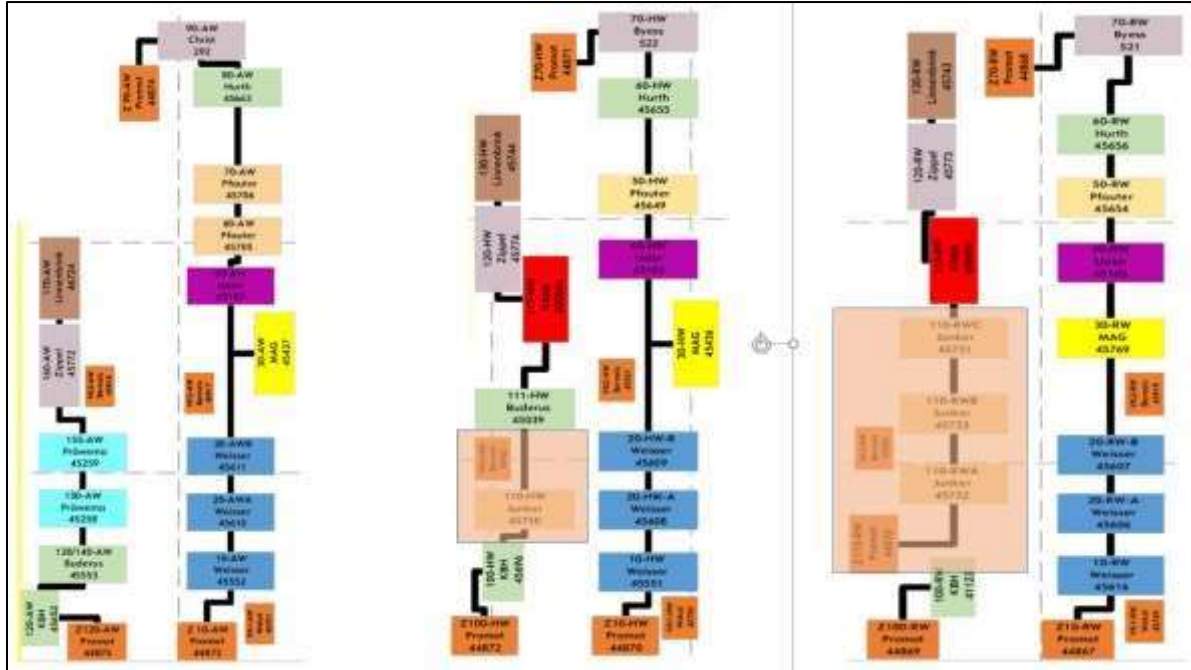


Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Machine-Supplier	Build in:
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1.2. Gear Shaft Lines

Machine Tool (35 pcs.), Washing Machine (6 pcs.), Noise test Machine (6 pcs.), Load- and Unloading Cell (10 pcs.)



1.2.2 OP 30 Spline-Cold forming; 3 pcs. Exello

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Shafts	OP 30	Spline - Cold forming	XK 875			MAG Exello	
				700045437	1640.9646-47		
							2001



1.2.3 OP 40...50 Drilling (Deep hole, Cross holes); 3 pcs. Unior

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Shafts	OP 40...50	Deep Hole Drilling & Cross Hole Drilling	FPZ 250-S	700045105	457- 0000 FPZ	Unior	2016
				700045106	458- 0000 FPZ		
				700045107	459- 0000 FPZ		



1.2.4 OP 50...80 Hobbing, 4pcs. Pfauter, Chamfering & Soft shaving, 3 pcs. Hurth

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Shafts	OP 60 ... 80	Chamfering & Soft Shaving	ZSE 150 T CNC	70045656	A 0120	Hurth	2002
				70045655	A 0121		
				70045663	A 0122		





1.2.5 OP OP 70...90 Washing End of Soft, 2 pcs. Byess & 1pcs. Christ

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Shafts	OP 70...90	Washing End of Softline	no designation	70000521	944 155	Byess	1994



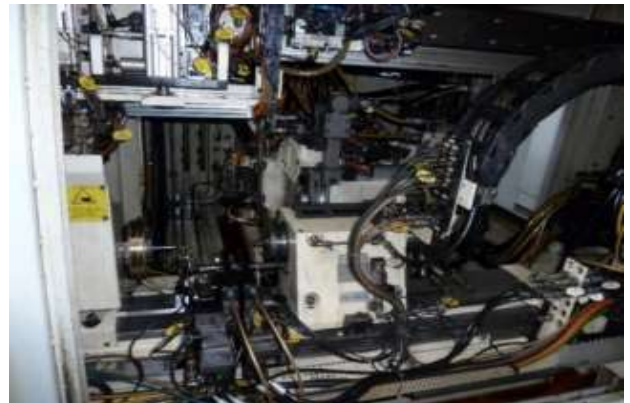
1.2.6 OP 100...120 Straightening, 1 pcs. KBH & 2 pcs. Eitel

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Shafts	OP 100...120	Straightening	no designation	700041123	15 064	KBH	2017
			AMS 25-2-800	70045696	30010	Eitel	2001
			AMS 33 3-800	70045652	30012		2001



1.2.7 OP 110...140 Contour Grinding, 4 pcs. Junker, 2 pcs. Buderus + 2 pcs. Cutting fluid-Unit

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	Machine Supplier	Build in:
Shafts	-	Filter Unit	MTBF-E 1000	-	38 065	LIQUI	2016
				-	38 066		2016



1.2.8 OP 115_155 HGF Crooning, 2 pcs. Kapp & Gear honing, 2 pcs. Präwema

Typ of Workpiece	OP-Nr.:	Operation	Mach.-Typ	Inv.-Nb.:	Commission-Nb.:	MachineSupplier	Build in:
Shafts	OP 115	Coroning	CX-120	700600067	084.0866	Kapp	2004
				700600066	084.0865		
	OP 150	Power-Hooning	Sychrofine 205 HS-A-W	700045258	057540	Präwema	2016
	OP 155			700045259	057541		



1.2.9 OP 120_130 End Washing, 3 pcs. Zippel and Noise Testing, 3 pcs. Linnenbrink

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Shafts	OP 120	End-Washing	ZD-4000-RT	70045773	ZD-392	Zippel	2002
				70045774	ZD-393		
			ZD-4500-RRT	70045772	ZD-391		
	OP 130	Noise-Testing	Shaft-Machines	70045743	5772.01	Linnenbrink	2016
				70045744	5772.02		
				70046724	5772.03		



1.2.10 Loading and Unloading Cells in the Shaft Area 10 pcs. Promot

Type of Workpiece	OP-Nb.:	Operation	Automation Cell	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Shafts	OP 10...20	Length Cutting & Centering	Single-type	700044867	2021-258.001-P	Promot	2016
			Single-type	700044870	2021-261.001-P		
			Single-type	700044873	2021-264.001-P		
	OP 70...90	Washing End of Soft	Single-type	700044868	2021-259.001-P		
			Single-type	700044871	2021-262.001-P		
			Single-type	700044874	2021-265.001-P		
	OP 110	Input Grinding	Single-type	700044876	2021-267.001-P		



1.3. 1. 4 pcs. Heat Treatment Systems and 3 pcs. Endo gas- Generators

Type of Workpieces	OP-Nb.:	Operation	Equipment	Inv.-Nb.:	Commission- Nb.:	Supplier	Build in:/ Rebuild in:
Gears & Shafts	60	Gas Carburizing + Oil Quenching	6m - Pusher-Furnace Nb. 1	31000463		LOI / Stange	1961/2001
	62	Washing	Washing Machine	60000562		Automatikus	?
	64	Tempering	Pusher-Furnace	to 31000463		LOI	1961/2001
		Buffer for HT-Fixture	Roller tracks	700049223	AUF2016GMD059	Reichmann	2016
	60	Gas Carburizing + Oil Quenching	6m - Pusher-Furnace Nb. 2	31000506	?	LOI / Stange	1961/2001
	62	Washing	Washing Machine	25220000	1085	Hinst	2001
	64	Tempering	Pusher-Furnace	to 31000506	?	LOI	1961/2001
		Buffer for HT-Fixture	Roller tracks	700049224	AUF2016GMD059	Reichmann	2016
	60	Gas Carburizing + Oil Quenching	9m - Pusher-Furnace	31000503	?	LOI / IVA	1965 / 2007
	62	Washing	Washing Machine	253000009 / 010	06733/67	TPS	2007
	64	Tempering	Pass-Through Furnace	to 31000503	?	LOI	1965 / 2007
		Buffer for HT-Fixture	Roller tracks	700049222	AUF2016GMD059	Reichmann	2016
	60	Gas Carburizing	12m - Pusher-Furnace	70040267	940.511.800	Aichelin / Ipsen	1995 / 2016
		Quenching	N ₂ -Gas-Quenching Cell	to 70040267	?	Seiler	2002
	62	Tempering	Pass-Through Furnace DHLE 1-50/55/50	to 70040267	?	Aichelin	1995
		Buffer for HT-Fixture	Roller tracks	700048375	AUF2016GMD059	Reichmann	2016
		Inert gas production	Endo Gas-Generator GGM 120R	70041449	217 401	Aichelin	1996
		Inert gas production	Endo Gas-Generator GGM 120R	70041450	218 402	Aichelin	1996
		Inert gas production	Endo gas-Generator GGM 120R	70041451	219 403	Aichelin	1996



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6 m – Furnace System. 2pcs. LOI Pusher Furnace; Washing Machine 2 pcs.; Tempering Furnace 2 pcs.



9 m – Furnace System 1 pcs. LOI Pusher Furnace; 1 pcs. Washing Machine; 1 pcs. Tempering Furnace



12 m – Furnace System 1 pcs. Aichelin Pusher Furnace; 1 pcs. Gas Quenching Unit; 1 pcs. Aichelin Tempering Furnace



Endo gas Generator 3 pcs. Aichelin



1.3.2 3 pcs. Shot Peening Systems

Type of Workpiece	Operation	Equipment	Inv.-Nb.:	Commission-Nb.:	Supplier	Build in:/ Rebuild in:
Gears	Shot Peening by impeller	Impeller-Shot Peening Machine	70600382	-	Wheelabrator	2011
	Loading- and unloading	Robots Cell (8 pcs. Robots)	700047551	0104-15-70	Robolution	2016
Shasfts	Shot Peening by impeller	Impeller-Shot Peening Machine	70045862	-	Schlick	2001
	Loading- and unloading	Robots Cell (3 pcs. Robots)	700047649		Güdel	2016
Gears + Shafts	Shot Peening by impeller	Impeller-Shot Peening Machine	70045902	-	Schlick	2001

Shot Peening System gears, 1pcs. Wheelabrator plus Load- & Unloading Cell, 1 pcs. Robolution



Shot Peening System Shafts, 1pcs. Schlick plus Load- & Unloading Cell, 1 pcs. Güdel



Shot Peening System, 1pcs. Schlick (manually Load- & unloading)

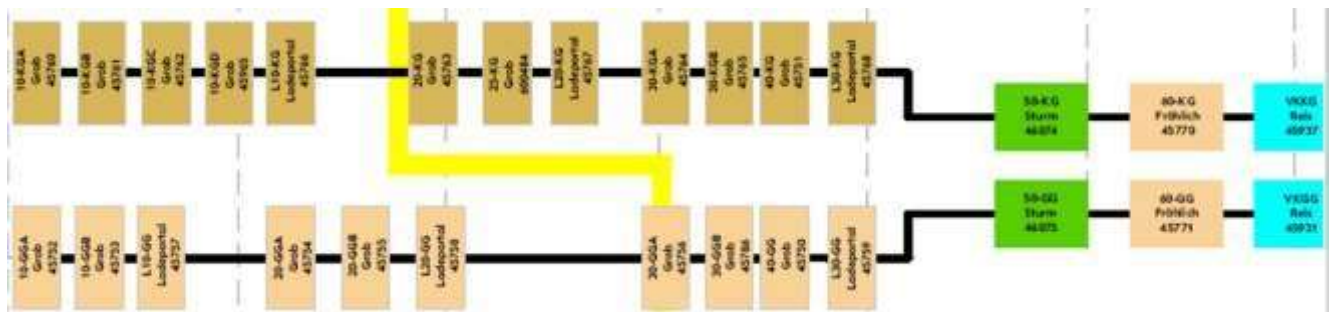


1.3.3 Offline Equipment

Operation	Equipment	Inv.-Nb.:	Commission-Nb.:	Supplier	Build / Rebuild
Tempering	Chamber Furnace	31000551	-	Degussa	?
Annealing	Laboratory Furnace	57019710	905543	Heraeus	?
Degreasing	Washing Machine K1-100-2LB-V	20000550	484	Zippel	1996



1.4. Transmission- and Clutch Housing Lines



Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	MachineSupplier	Build in:
Clutch Housin	OP 40	Measuring	Checking-Device F 40	70045651	M 1043	Grob / Lehnert	2001
	OP 40	Measuring	Checking-Device M 24	70045542	?	Grob / Lehnert	2016
		Automation	Robot Cell include Load-and Unloading Conveyor	70045937	38.038.00 54.288.00	Reis / EWAB / KUKA	2001

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	MachineSupplier	Build in:
Transmission Housing	OP 40	Measuring	Checking-Device	70045650	M 1044	Grob / Lehnert	2001
		Automation	Robot Cell include Load-and unloading conveyor	70045931	38.037.00 54.286.00	Reis / EWAB / KUKA	2001
		Cleaning	Hand washing stand	W 576179	230 888	WUMO	2004

Type of Workpiece	OP-Nr.:	Operation	Mach.-Type	Inv.-Nb.:	Commission-Nb.:	MachineSupplier	Build in:
Alu-Prismatics		Measuring offline 3-D Measurement room					
			Roughness tester	57014549	-	Mahr Perthen	?

1.4.1 Machine Centers, 14 pcs. Grob





MC Type A MC Type B

_MC Type A/B



1.4.2. Blow-off Stations, 6 pcs. Knoth



1.4.3. Inline Checking Devices, 3 pcs. Grob/Lehnert



1.4.4 Linear Gantries including Pallet Conveyors, 6 pcs. Grob/EWAB



1.4.5. Roboter Cells, 2 pcs. Reis/KUKA/EWAB



1.4.6 Leak Tester, 2 pcs. Fröhlich/KUKA



1.4.7. Washing Machine, 2 pcs. Sturm; Cleaning box, 1 pcs. WUMO



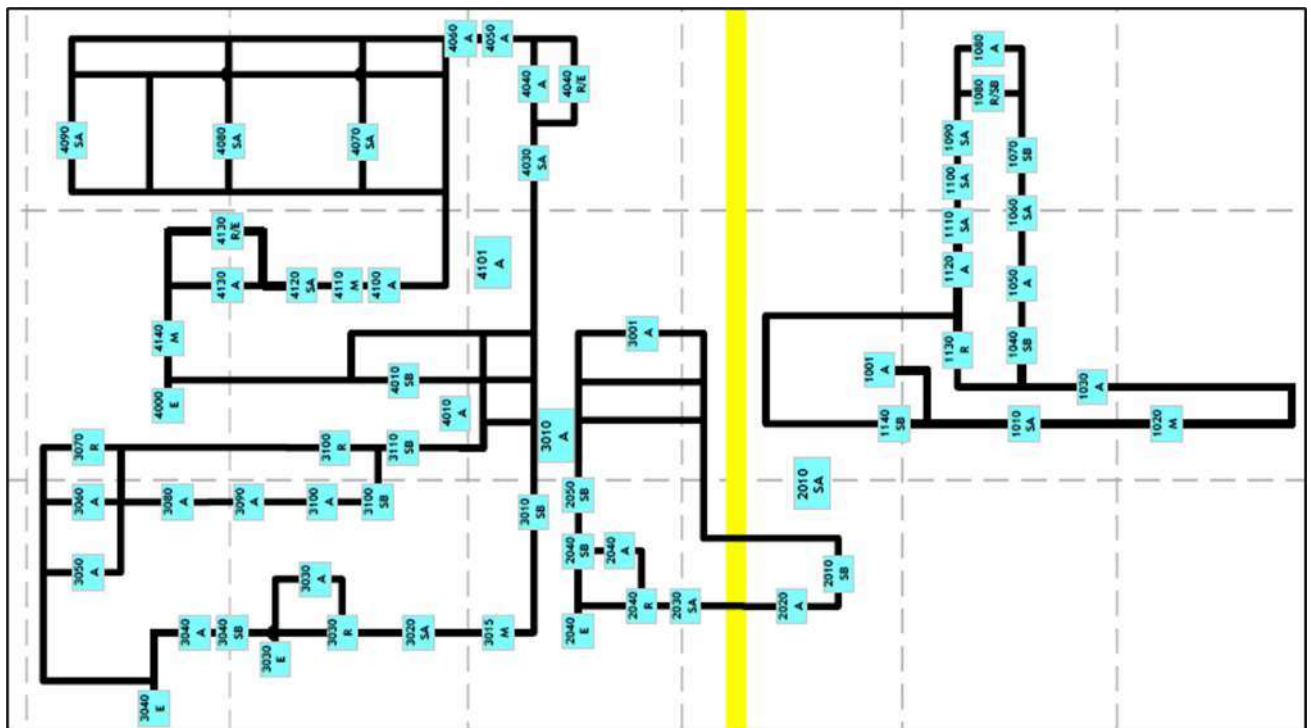
1.4.8. Measurement Machines 3 pcs. Zeiss + Roughness Tester



1.4.9. Collant Filtration, 2 pcs. Hydromation

Machine	Mach.-Typ	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Coolant filtration	Coolant station	47000281	85553/54	Hydromation	1985
Coolant filtration	Coolant station	47000284	85576/77		1985





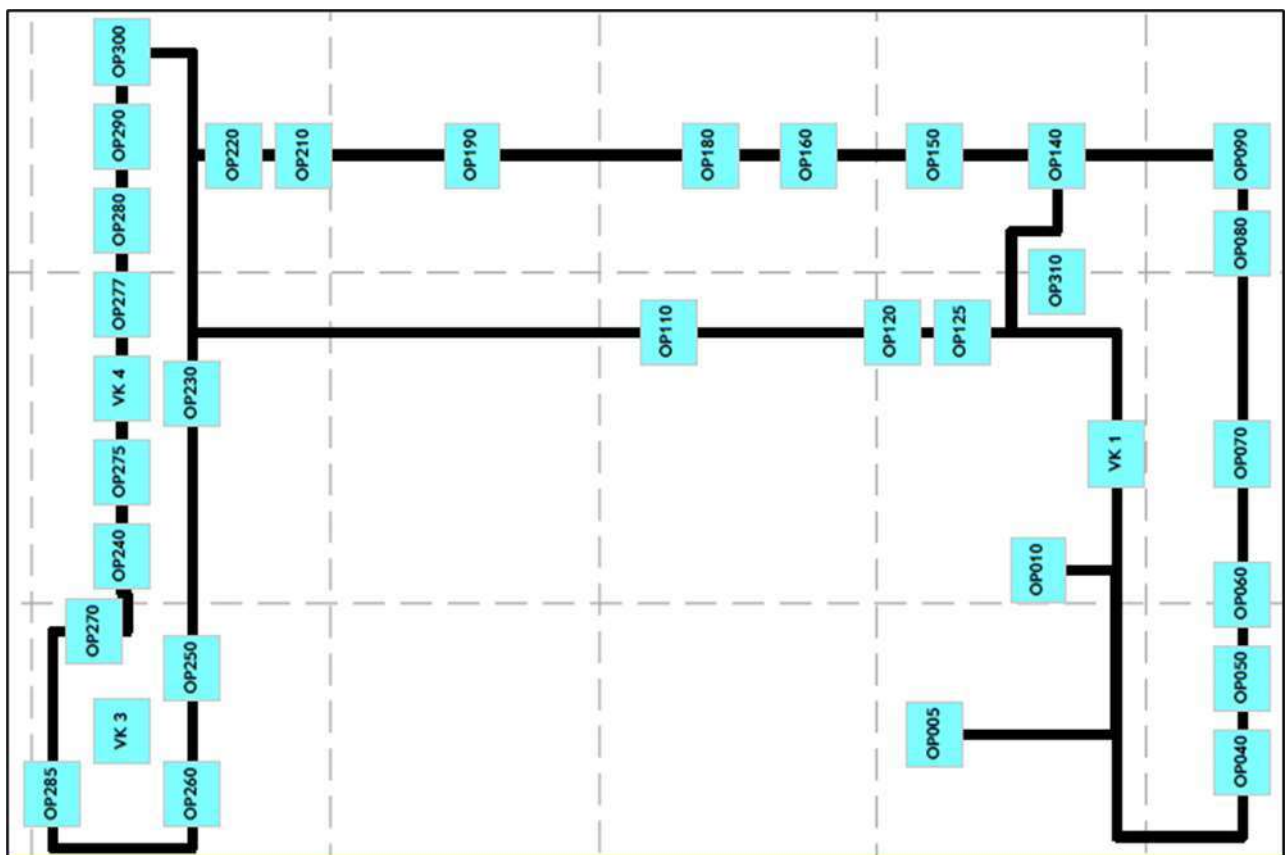


Equipment	OP-Nr.:	Operation	Inv.-Nb.:	Commission-Nb.:	MachineSupplier	Build in:
assembly line	OP 1030 A	camera check	700044180		Hanwha	2016
assembly line	OP 1040 SB	Stanby WT Kitting	700044177		Hanwha	2016
assembly line	OP 1050 A	Load&Preassy Shaf	700044181		Hanwha	2016
assembly line	OP 1060 SA	shaft assembly	700044182		Hanwha	2016
assembly line	OP 1070 SA	shaft assembly	700044183		Hanwha	2016
assembly line	OP 1080 A	spur gear screw connection	700044184		Hanwha	2016
assembly line	OP 1080 R/SB		700044184		Hanwha	2016
assembly line	OP 1090 SA	shaft assembly	700044185		Hanwha	2016
assembly line	OP 1100 SA	shaft assembly	700044186		Hanwha	2016
assembly line	OP 1110 SA	shaft assembly	700044187		Hanwha	2016
assembly line	OP 1120 SA	mounting bearing plate	700044188		Hanwha	2016
assembly line	OP 1130 R	rework shaft assembly	700044177		Hanwha	2016
assembly line	OP 1140 SB	Standby WT unloading	700044177		Hanwha	2016
assembly line	OP 2020 A	screw connection bearing plate	700044191		Hanwha	2016
assembly line	OP 2030 SA	pre-assembly of gearbox housing assembly on wheelset	700044191		Hanwha	2016
assembly line	OP 2040 A	gearbox housing screw connection	700044193		Hanwha	2016
assembly line	OP 2040 E	ejection station	700044189		Hanwha	2016
assembly line	OP 3010 A	Unload ML1 Palett	700044196		Hanwha	2016
assembly line	OP 3010 SA		700044196		Hanwha	2016
assembly line	OP 3020 SA	pre-assembly clutch housing	700044197		Hanwha	2016
assembly line	OP 3040 A	Shim Station & Press	700044199		Hanwha	2016
assembly line	OP 3080 A	camera test	700044202		Hanwha	2016
assembly line	OP 4000 E	transmission infeed	700044205		Hanwha	2016
assembly line	OP 4010 SB	standby loading WT	700044205		Hanwha	2016
assembly line	OP 4030 SA		700044207		Hanwha	2016
assembly line	OP 4030 A	shifter fitting	700044207		Hanwha	2016
assembly line	OP 4030 M	M shifter assembly	700044207		Hanwha	2016
assembly line	OP 4040 A	leak test	700044208		Hanwha	2016
assembly line	OP 4040 R/E	rework leak test	700044205		Hanwha	2016
assembly line	OP 4060 A	Pre-Run Torque Check	700044210		Hanwha	2016
Transmission Testbench 1	OP 4070 SA				TKSY	2016
Transmission Testbench 2	OP 4080 SA				TKSY	2016
Transmission Testbench 3	OP 4090 SA				TKSY	2016
assembly line	OP 4100 A	Oil Filtration Un	700044211		Hanwha	2016



assembly line	OP 4110 M	Installation of transport caps	700044205		Hanwha	2016
assembly line	OP 4120 SA	Romove Oil Adapt	700044213		Hanwha	2016
assembly line	OP 4130 E				Hanwha	2016
assembly line	OP 4130 R	rework final camera check discharge station	700044205		Hanwha	2016
assembly line	OP 4140 M	Final Buy Off	700044205		Hanwha	2016
Washing machine		WST M&T Loop	700046094		Sturm	2016

1.5.2 Assembly Gear F40





Equipment	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Rolling rail shelf 100193592	01PT01003883		TDI Automation	2001
Flow rack with ball roller table	000700036976	2459464	BITO	2001
assembly line TRI	01PT70045667	2893.50-EP01	LSW	2001
assembly line	01PT70045668	2893.51	LSW	2001
assembly line	01PT70045670	2893.01/31866	LSW/Promess	2001
assembly line	01PT70045671	2893.02/31795	LSW/Promess	2001
assembly line	01PT70045672	2893.04/31867	LSW/Promess	2001
assembly line	01PT70045673	2893.39/31867	LSW/Promess	2001
assembly line	01PT70045674	2893.05/31860	LSW/Promess	2001
assembly line ST0080	01PT70045675	2893.06-EP01/31861	LSW/Promess	2001
assembly line 110	01PT70045676	2893.07/31864	LSW/Promess	2001
assembly line	01PT70045677	2893.11/31869	LSW/Promess	2001
assembly line	01PT70045678	2893.10/31791	LSW/Promess	2001
assembly line	01PT70045681	2893.08	LSW	2001
assembly line	01PT70045682	2893.12/31865	LSW/Promess	2001
assembly line	01PT70045683	2893.29	LSW	2001
assembly line	01PT70045684	2893.14	LSW	2001
assembly line	01PT70045685	2893.15/300 2237-1000	LSW /SCA	2001

assembly line	01PT70045687	2893.19	LSW	2001
assembly line	01PT70045689	2893.20	LSW	2001
surface cleaning	01PT70045694	2893.24	SEW-EURODRIVE	2001
gauging station 125	01PT70600152	2893.40	LSW	2001
Through feed rack	28028548	373046	BITO	2001
Handling device	w/o	4039/DE524	Binar	2001
Handling device	01PT023000002		Zasche	2001
PVC Vorhang NPL 5016641-0010	01PT33000237		Bohle	2001
Lamellenschutzvorhang NPL 5011074-0010	01PT33000203		Bohle	2001
Getriebepfandstand 32-428620	01PT70045690	407.50 076	Cegelec	2001
Getriebepfandstand 32-428620	01PT70045691	407.50 077	Cegelec	2001
Getriebepfandstand 32-428620	01PT70045692	407.50 078	Cegelec	2001
Extension Measuring Tables	01PT57032194	010705H/11/01	Maschinenbau Kitz	2001
Erweiterung Getriebelinie F40 100283652	01PT70600101	AUF 73017-200	TKSY	2001
Lifting Station	700047125	H-11330	Bloksma	2016

Lifting Station	700047121	H-11032	Bloksma	2016
Lifting Station	700047122	H-11032	Bloksma	2016
Lifting Station	700047120	H-11031	Bloksma	2016
Lifting Station	700047119	H-11030	Bloksma	2016

1.6. Beside equipment of following areas

- Equipment in the tool shops
- Equipment for probe preparation
- Equipment for quality control at heat treatment characteristics
- Measurement rooms
- Repair location
- Tool management
- Logistic

Equipment in the tool Shops

Location	Machine	Mach.-Typ	Inv.-Nb.:	CommissionNb.:	Machine-Supplier	Build in:
Main Maintenance	Abkantbank	AM 2000/8	78030550	731729	Köllschen	1973
Main Maintenance	Disksaw	VMS 300	28-221363	411033M0002	Eisele	1999
Main Maintenance	<u>Mitre Saw</u>	Scorpio 315	72031432	?	MEP	?
Maintenance HT	<u>Box Column Drill</u>	GT 16	28291	160526	Gillardon	?
Main Maintenance	<u>Box Column Drill</u>	?	14496	?		?
Main Maintenance	<u>Box Column Drill</u>	TB 160 P	57004638	?	AEG	?
Main Maintenance	Drilling Machine		70021456	?	Otto Müller	?
Main Maintenance	Turning Machine	KM 200	70024396	15428	Martin	1963
Main Maintenance	Center Turning Machine	Matador	70038810	91-181	Weiler	1991
Main Maintenance	Grinder for Milling tools	?	70022822	?	CINCINNATI	?
Repair Shop	Washingbox	?	54910193	?	Autop	?





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Equipment for probe preparation

Location	Machine	Mach.-Typ	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Lab. Heat Treatment	Band Sawing Machine	MSU 4	40001780	899903	Jaespa	?
Lab. Heat Treatment	Disk Cutter	Axiotom - 5	700033846	54810122	Struers	2012
Lab. Heat Treatment	Disk Cutter	Exotom	70039171	3810625	Struers	?
Lab. Heat Treatment	Disk Cutter	Brillant 230	70600229	13662	ATM	2008
Lab. Heat Treatment	Disk Cutter	Disotom 1	70031877	?	Struers	?
Lab. Heat Treatment	Bench Grinder	D 17	70016685	61219	Greif	?
Main Maintenance	<u>Bench Grinder</u>	DS 12 / 20	?	-	Rema	?
Main Maintenance	<u>Bench Grinder</u>	-	?	-	Metasbo	?
Maintenance HT	<u>Bench Grinder</u>	-	70026244	-	Metasbo	?
Lab. Heat Treatment	Belt Grinder	B 150 S	70031873	77618061	MAFAC	1977
Lab. Heat Treatment	Double Belt Grinder	Jade 700	33000220	13086	ATM	2008
Main Maintenance	Band-/Disk Grinder	BTS 51	ohne	3700051	Metallkraft	2017
Lab. Heat Treatment	Mounting Press	ProntoPress - 10	23020724a	5061010	Struers	?
Lab. Heat Treatment	Mounting Press	ProntoPress - 10	23020724b	5061103	Struers	?
Lab. near office Lab. Heat Treatment	Mounting Press	LaboPress - 3	57032166	5082115	Struers	?
	Double Disk Grinder	LaboPol 25	33000242	58610132	Struers	2011
Lab. Heat Treatment	Double Disk Grinder	LaboPol 26	33000243	58610131	Struers	2011
Lab. near office	Double Disk Grinder	RotoPol 2	30001227	4960223	Struers	?
Lab. near office	Grinder	AbraPlan	40001829	?	Struers	?
Lab. near office Lab. Heat Treatment	Polischer	AbraPol-2	40001830	?	Struers	?
	Laboratory fume for etching	-	-	-	Köttermann	?
Lab. near office Lab. Heat Treatment	Laboratory fume for etching	-	57020410	-	Köttermann	?
	<u>Drying Oven</u>	-	40000440	-	Heraeus	?
Lab. near office	<u>Drying Oven</u>	-	57008147	-	Memmert	?





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Equipment for quality control at heat treatment characteristics

Location	Machine	Mach.-Typ	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Lab. Heat Treatment	Hadness Tester Brinell	Briviskop 3000 H	70014710	-	Reicherter	?
Lab. Heat Treatment	Hadness Tester Brinell	Briviskop 3000 H	70023127	-	Reicherter	?
Lab. Heat Treatment	Hadness Tester Brinell	Briviskop 3000 D	70030371	-	Reicherter	?
Lab. Heat Treatment	Hadness Tester Brinell	Briviskop 3000 H	40000258	-	Reicherter	?
Lab. near office	Hadness Tester Universal	UH 250	57029705	588808972	Reicherter	1997
Lab. near office	Hadness Tester Rockwell	Briro VA	70028164	-	Reicherter	?
Lab. Heat Treatment	Hadness Tester Rockwell	Briro VAK Digit.	70035220	1.011.004	Reicherter	1981
Lab. Heat Treatment	Hadness Tester Rockwell	Briro VAK Digit.	30003012	582610962	Stifelmayer	1996
Lab. Heat Treatment	Hadness Tester Rockwell	Briro VAK II	57015787	220200 - 169	Reicherter	1986
Lab. Heat Treatment	Hadness Tester Rockwell	Testor HT 2a	70029322	6634985	Wolpert	1996
Lab. Heat Treatment	Hadness Tester Rockwell	Briro Uvn	70021277	-	Reicherter	?
Lab. Heat Treatment	Hadness Tester Rockwell	Briro RK	70600190	656812062	Stifelmayer	2006
Lab. Heat Treatment	Microhardness Tester	Brivisor +KI 4	70600189	656712062	Reicherter	2006
Lab. Heat Treatment	Microhardness Tester	LV-700 AT	?	EV7265	Leco	2004
Lab. near office	Microhardness Tester	V-100-C	30001228	130128	Leco	?
Lab. near office Lab. Heat Treatment	Microhardness Tester	M-400-G	70038811	250646	Leco	?
	Measuring Microscope	CZW 1	?	-	HITEC	?
Lab. near office	Stereo Microscope	SZ40	?	-	Nikon	?
Measurement Room	Stereo Microscope	M3Z	57019322	-	Wild	?
Lab. Heat Treatment	Light Microscope	Eclipse E 400	40002550	67 66 10	Nikon	2002
Lab. Heat Treatment	Residual Dirt Analyzer	PCC - 40 - R0220 B	40002547	5115-07/00	Pall	2002
Lab. near office	Residual Dirt Analyzer	-	235220107	4803-07/00	Pall	?

GREEN: new / additional machines for sale



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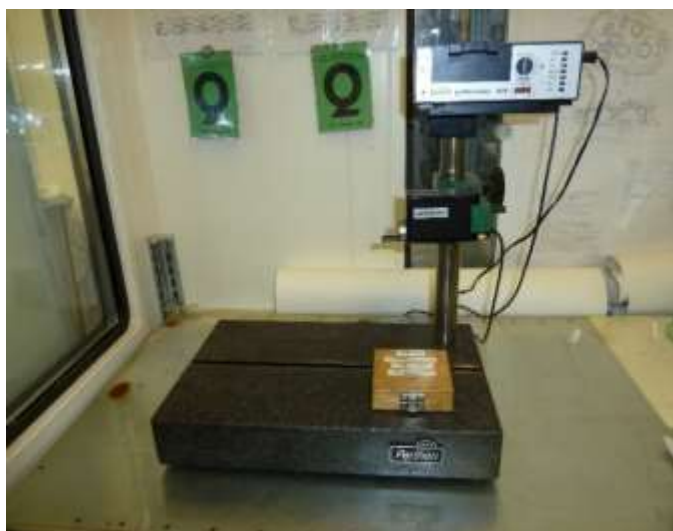






Equipment for quality control at geometrical characteristics

Location	Machine	Mach.-Typ	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier
Measurement Room	Measuring Station (Roundness Meter)	Etamic F455	700052960	-	Hommel
Measurement Room	Roughness Tester	PST-MSE	30002155		Mahr
Measurement Room	Roughness Tester	?	57014549	-	Mahr Perthen
Measurement Room	Altimeter	Micro-Hite plus M 600	700035958	-	Tesa
Measurement Room	Torque Tester	5413-4200	42033055	1012264	Schatz





Equipment from Tool Management

Location	Machine	Mach.-Typ	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Tool Management	Vertical automatic storage system	14448/25B/6410	70045917	534132	Megalift	2002
Tool Management	Vertical automatic storage system	Shuttle XP 500	700045900	15007482/003	Kardexremstar	2016



1.7. Central Aggregates

Central Equipment						
Location	Machine	Mach.-Typ	Inv.-Nb.:	Commission-Nb.:	Machine-Supplier	Build in:
Gear Area	Dry Dust Catcher	-	10003230	?	Aircon	2001
Heattreatment (for the 6m Furnaces)	Dry Dust Catcher	DLT 1002742	700047747	P 519 218	DencoHappel	2016
Heattreatment (for the 9mFurnace)	Dust Catcher	Nassabscheider f. HBV- u. LAU-Syst.	8030008	?	IVA-Industrieöfen	2007
Outside West	Oil Vapour Exhaust	?	10001406	?	Aircon	?
Outside West	Oil Vapour Exhaust	?	10002392	?	Aircon	?
Nord Side	Chip Extraction (including chip tower)	DB 235 CVAC	70045794	101 / 102 / 103	TBE- Habermehl / METAS	2001
Outside West	Cooling Tower Facility	AuRü-GP	47300003	7560	Kühlturm Karlsruhe	2007
Outside West	Cooling Tower Facility	KI3/12-40-10	700046008	1603007970-10	Econdition	2016

Table color markings:

GREEN: new / additional machines for sale





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Summary Asset list:

The asset list contains the major sales content.

The photos are shown for orientation purposes. Not all assets shown on the photos are for sale. For clarification, please use the asset lists with the different colors.

All assets marked in yellow (new in this revision 1) and orange are not in the sales content. The green ones are newly added assets.