



**NAKANISHI JAEGER GmbH**  
Company Presentation  
Grinding Industry

# Introduction



The diverse fields of application for grinding technology also require a high level of flexibility for a grinding spindle, drilling spindle, milling spindle, or rotating spindle. Our spindle systems can be used in a diverse range of applications and work precisely and reliably in every field.

# Grinding Spindles

Grinding process required an high precision and good quality surface in finishing.

We can obtain this results with our high-frequency spindle, thanks to high load capacity, stiffness, precision.

# Grinding Spindle

- ✓ Housing diameter from 33mm up to 120mm
- ✓ Speed Max up to 100.000rpm
- ✓ Manual tool change : ER; HSK-C; HSK-D
- ✓ Automatic tool change : HSK-E; HSK-F;SK
- ✓ Ball bearings grease lubricated for life
- ✓ Power up to 18kW S1/100%
- ✓ Speed sensors – Vector control – Thermal PTC/KTY
- ✓ Run out < 1micron

# Grinding Spindle – Some example

MODEL	HOUSING DIAM.	POWER S1	SPEED MAX	TOOL INTERFACE	COOLING
Z33-M060.51 K2S15	33mm	0,43kW	60.000rpm	Collet ER 8	Via clamping bracket
Z33-M0100.04 K2S15	33mm	0,30kW	100.000rpm	Collet ER 8	Via clamping bracket



MODEL	HOUSING DIAM.	POWER S1	SPEED MAX	TOOL INTERFACE	COOLING
Z62-M280.24 K1,2CK	62mm	1,2kW	80.000rpm	Collet ER 11	Liquid cooling
Z62-M460.02 S21	62mm	1,8kW	60.000rpm	HSK-C25	Liquid cooling



# Grinding Spindle – Some example

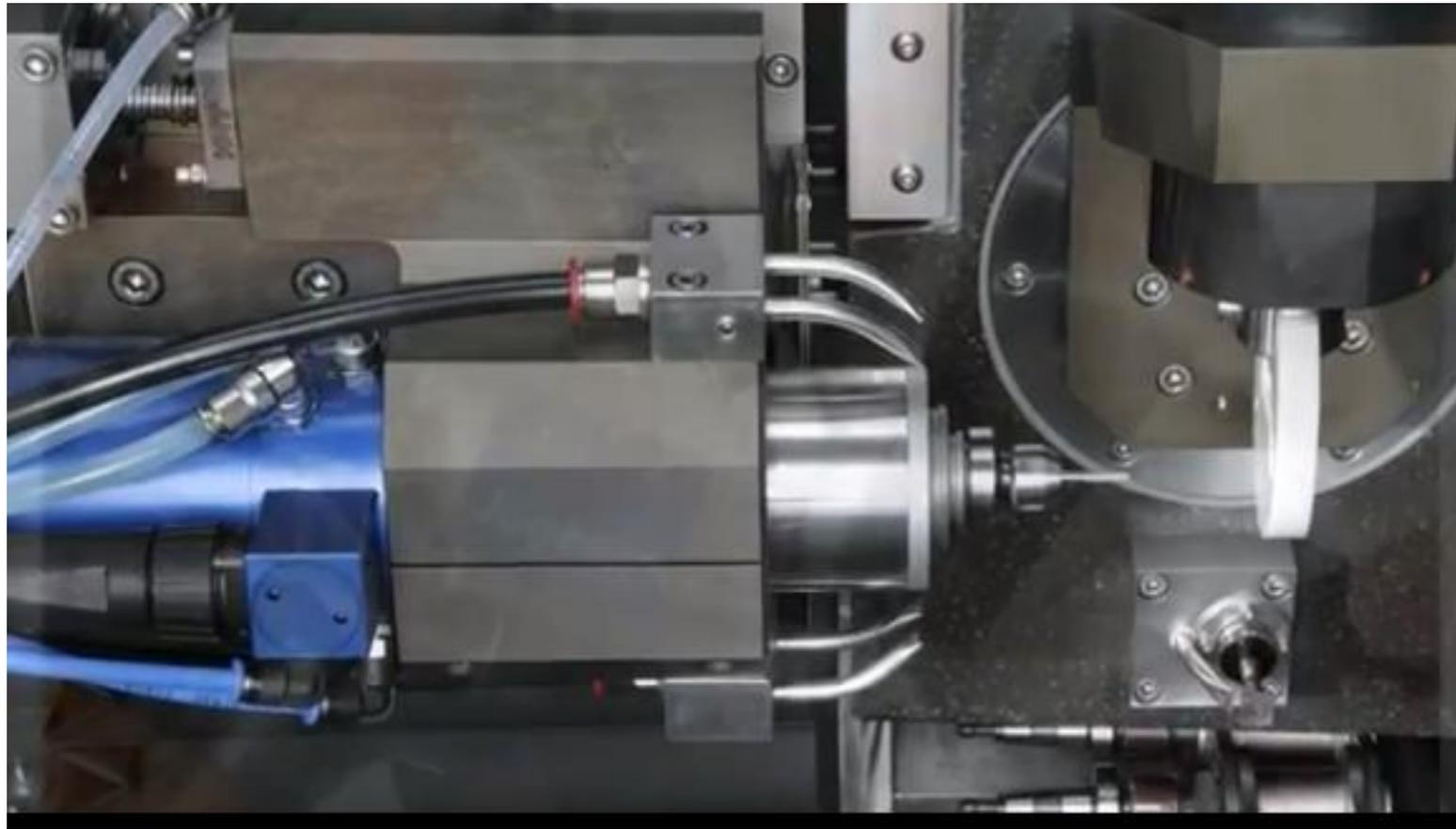
MODEL	HOUSING DIAM.	POWER S1	SPEED MAX	TOOL INTERFACE	COOLING
Z80-M525.05 S5	80mm	4,0kW	25.000rpm	HSK-E32	Liquid cooling
Z80-M450.06 S5V	80mm	2,7kW	50.000rpm	HSK-C25	Liquid cooling



MODEL	HOUSING DIAM.	POWER S1	SPEED MAX	TOOL INTERFACE	COOLING
Z100-M636.03 S5V	100mm	10kW	36.000rpm	HSK-C50	Liquid cooling
Z120-M824.01 S11V	120mm	18kW	24,000rpm	HSK-C 50 + HSK-D 63	Liquid cooling



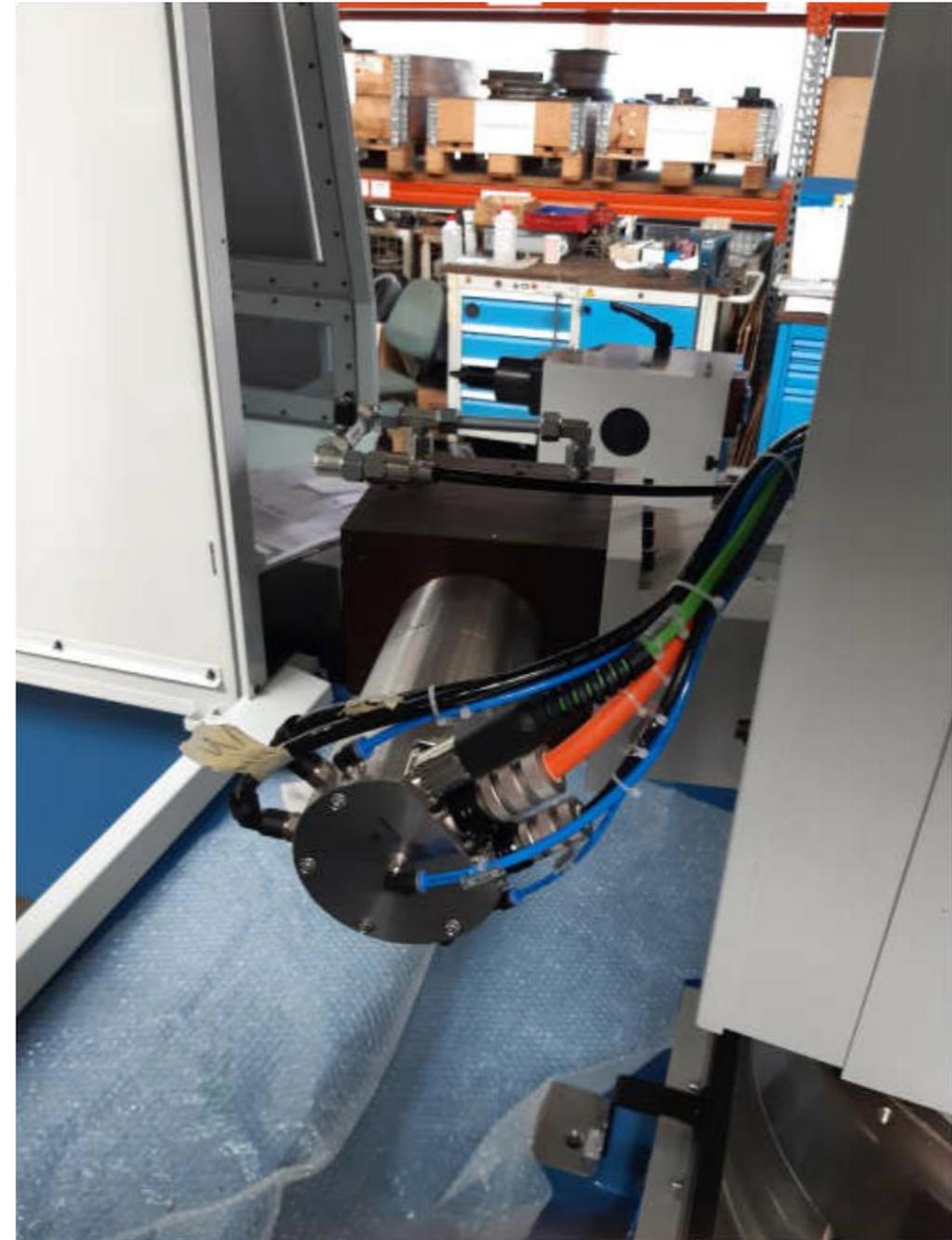
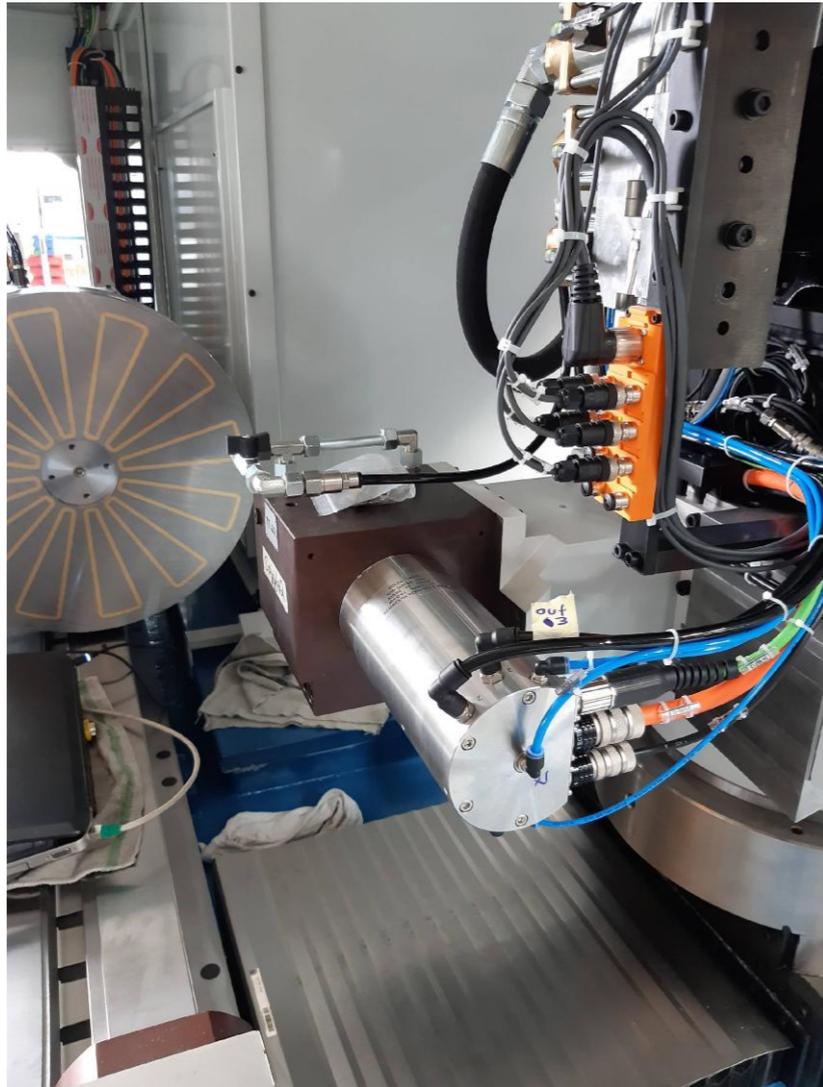
# Application



ID Grinding Machine  
Spindle Type: Z80-M450 and Z100-M536  
Example Company Hardinge



# Application



Face Grinding Machine  
Spindle type Z120-H824.10 S11W2V  
Example Company CNC Technik Weiss

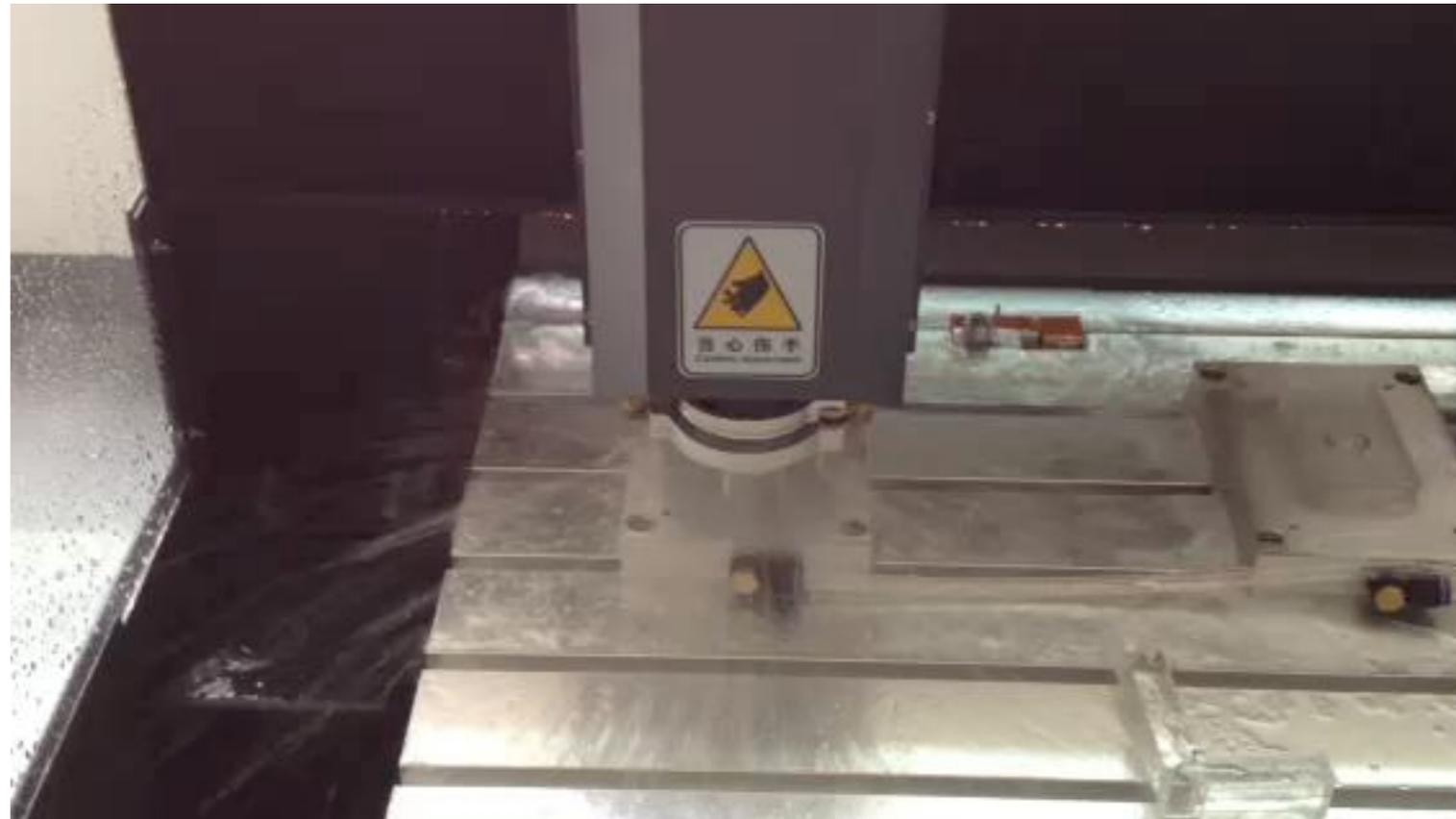
# Applications



Grinding Machine  
Spindle Type Z120-H824.11 S11EW2V  
Example Company Kellenberger Machine

# LCD Glass Grinding

Mass Production of LCD Glasses for Mobile Phones, Tablets, Navigation Systems, TV's



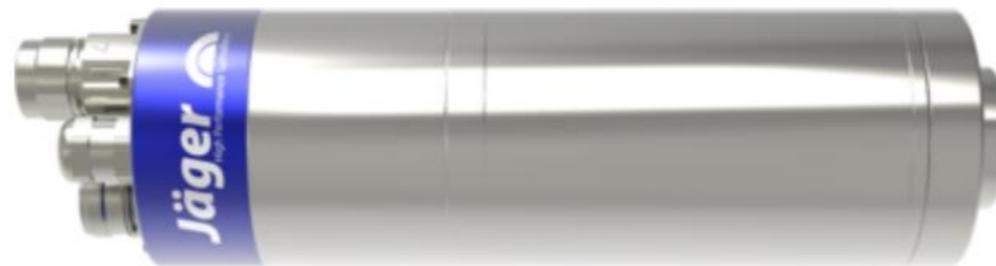
## Dressing spindle «ARS Line»

Nakanishi Jaeger “ARS” series are the spindle dedicated for the high precision dressing and profiling applications to complete the grinding machines.

All our dressing spindles are equipped with optional acoustic emission sensor to improve machining quality and increase the lifetime of grinding discs.

# Dressing spindle «ARS Line»

- ✓ Cylindrical housing from 33mm up to 72mm
- ✓ Power from 0,3kW up to 3,2kW S1
- ✓ Speed max up to 60.000rpm
- ✓ SBS or Marposs/Dittel sensor
- ✓ Cut detection
- ✓ Highest precision, highest run-out, Accurate grinding and dressing
- ✓ Bearings with grease lubrication for life



# Dressing spindle – Technical data

MODEL	HOUSING DIAM.	POWER S1	SPEED MAX	TOOL INTERFACE	COOLING
ARS33-M060.52 K5S2	33mm	0,43kW	60.000rpm	Grinding wheel maximum dia. 20 mm maximum t = 4 - 6 mm	Via clamping bracket
ARS33-M060.51 K04S25	33mm	0,43kW	60.000rpm	disc tool maximum dia. 50 mm maximum t = 2 mm	Via clamping bracket
ARS42-M140.05 K3 S21E	42mm	0,25kW	40,000rpm	ISO 4762	Via clamping bracket
ARS72-M216.04 S3	72mm	0,5kW	16,000rpm	Tool Holder: X= grinding wheel D1= 40 h3 mm D2= 100 mm t= 10 - 20 mm	Via clamping bracket
ARS72-M416.09 S3 E	72mm	2,1kW	16,000rpm	8xM5	Liquid cooled
ARSP72-M416.07 S3V	72mm	3,5kW	16,000rpm	Disc tool dia. 35 mm t = 32 mm	Liquid cooled

## Optional:

- Acoustic sensor
- Marposs/Dittel or SBS
- Vector control
- Receiver for sensor
- Inverter



# Thank you for your attention!

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