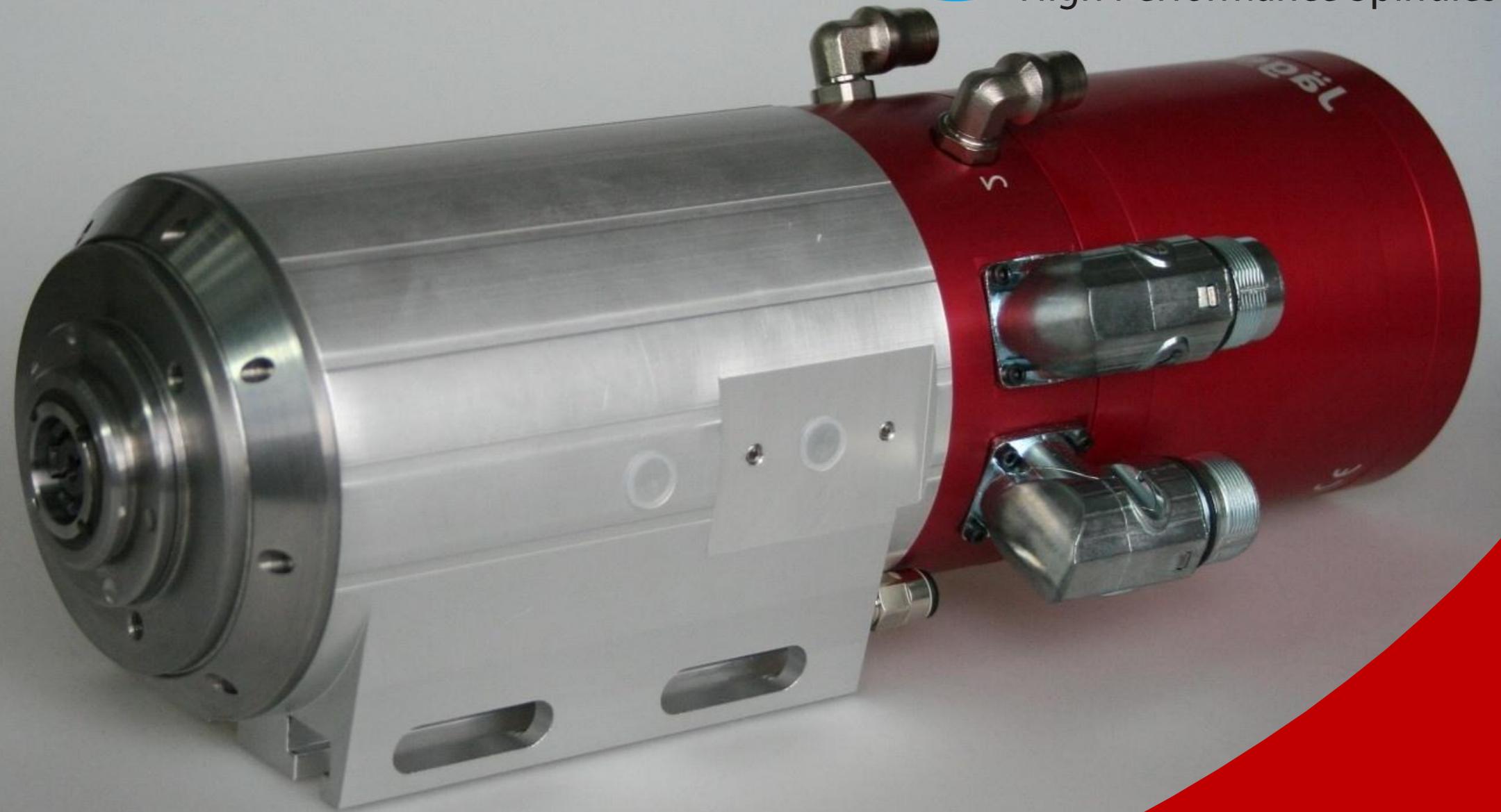


# Chopper Spindles

**Jäger**   
High Performance Spindles



# Jägers Chopper Philosophy

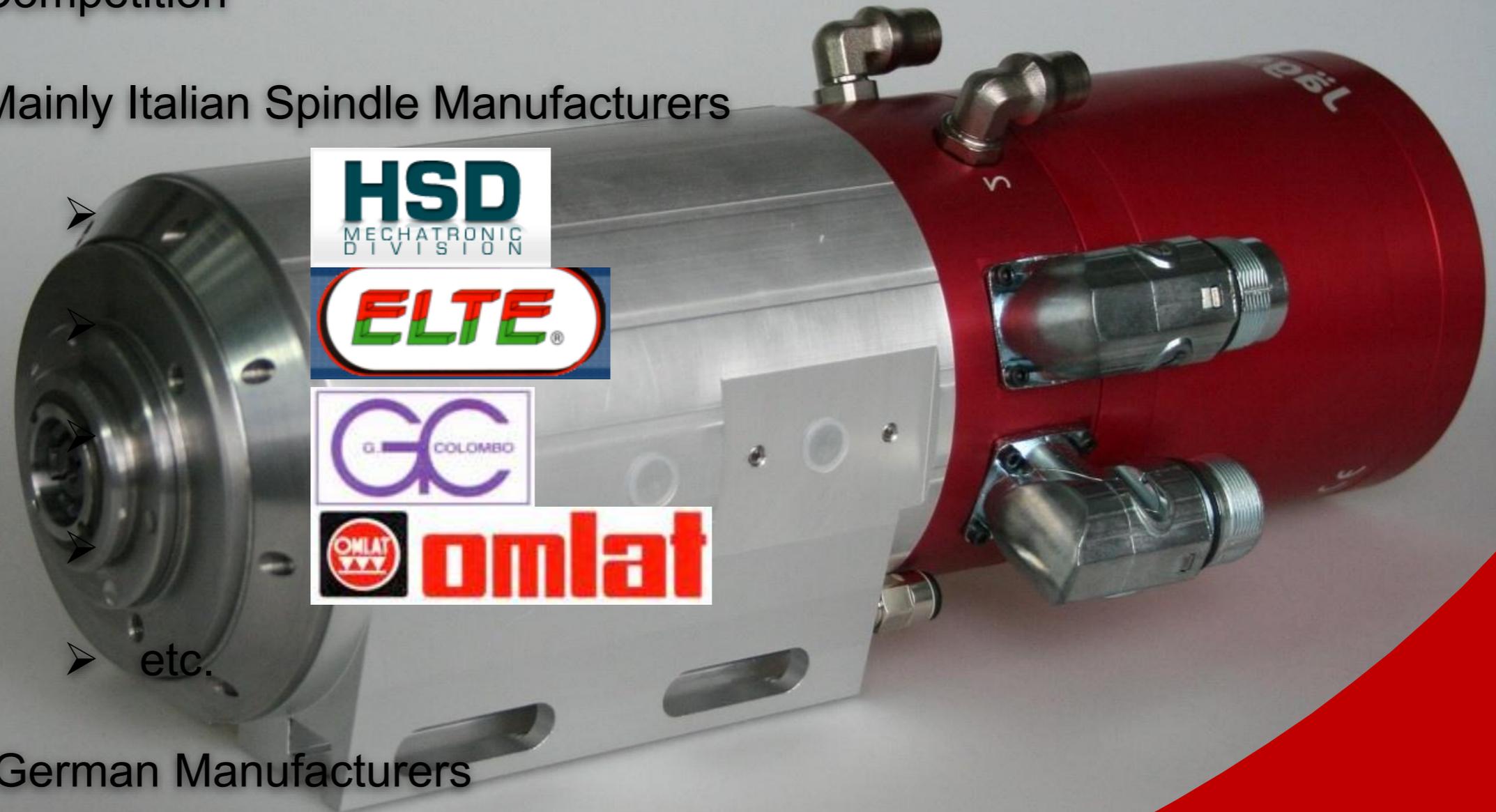
- lower price means not Low Quality!
- Jäger quality for reasonable prices – “Quality without compromises”
- rigid, reliable and robust spindle design
- integrated clamping fixtures
- various ATC options (ER16/25, WK19, HSK-E25/32, ISO30/BT30 HSK-F63)
- lifetime-lubricated bearings
- self-cooling-fan systems don't require costly chiller units
- “Chopper-Bundles” including appropriate inverters with many options and accessories.
- Various accessories available



**Jäger**

# Competition

- Competition
- Mainly Italian Spindle Manufacturers



**HSD**  
MECHATRONIC  
DIVISION

**ELTE**

**GC**  
G. COLOMBO

**OMLAT**  
**omlat**

➤ etc.

- German Manufacturers

➤

**perske**

**Jäger**

# Industries and Applications

- Wood Industries

- Furniture- and Sign-Industry



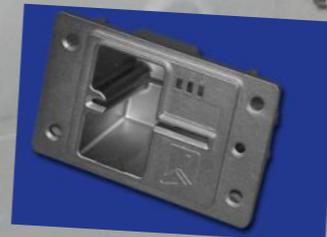
- Plastic Industries

- Sign – and Advertising Industry, Boat Manufacturing



- Aluminum and Molding Industries

- Die-casting and Molding



- Robotics Industries

- Deburring, Routing and Grinding



**Jäger**

# The Chopper Series

<b>Spindle Type</b>	<b>Tool change</b>	<b>Speed Max</b>	<b>Power S1</b>	<b>Cooling</b>
<b>C80-M430</b>	Manual ER	30,000rpm	2kw	Liquid
<b>C80-M440</b>	Manual ER	40,000rpm	2kW	Liquid
<b>C80-H442</b>	Pneumatic taper HSK-E25	42,000rpm	3,4kW	Liquid
<b>1500 H</b>	Manual ER	30,000rpm	1,5kW	Fan
<b>1500 D</b>	Pneumatic collet	30,000rpm	1,5kW	Fan
<b>1500 HSK / K</b>	Pneumatic taper HSK / WK Jaeger	30,000rpm	1,5kW	Fan
<b>2300 H</b>	Manual ER	40,000rpm	2,3kW	Liquid
<b>2300 HSK / K</b>	Pneumatic taper HSK / WK Jaeger	40,000rpm	2,3kW	Liquid
<b>3300 H</b>	Manual ER	30,000rpm	3,3kW	Fan
<b>3300 HSK</b>	Pneumatic HSK	30,000rpm	3,3kW	Fan

***Jäger***

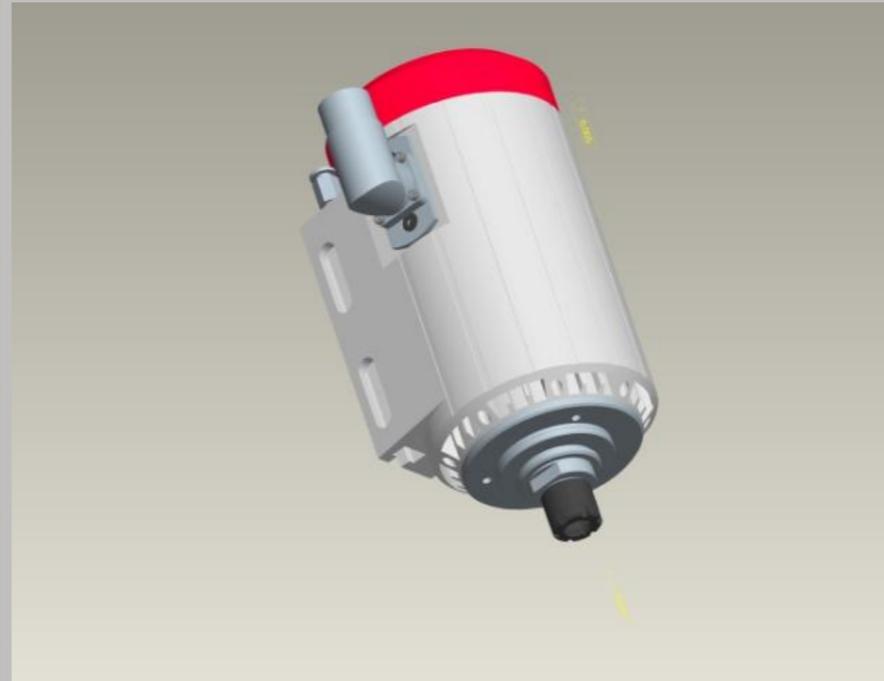
# The Chopper Series

<b>Spindle Type</b>	<b>Tool change</b>	<b>Speed Max</b>	<b>Power S1</b>	<b>Cooling</b>
<b>5000 H</b>	Manual ER	30,000rpm	5,0kW	Liquid
<b>5000 HSK</b>	Pneumatic HSK	30,000rpm	5,0kW	Liquid
<b>6500 H</b>	Manual Taper HSK C50	24,000rpm	6,5kW	Fan
<b>6500 HSK / SK</b>	Pneumatic HSK-F3 / SK30	24,000rpm	6,5kW	Fan
<b>C100-M430</b>	Manual – Double shaft ER	30,000rpm	1,5kW / 2,3kW	Without/Liquid

**Jäger**

# The Chopper 1500 H

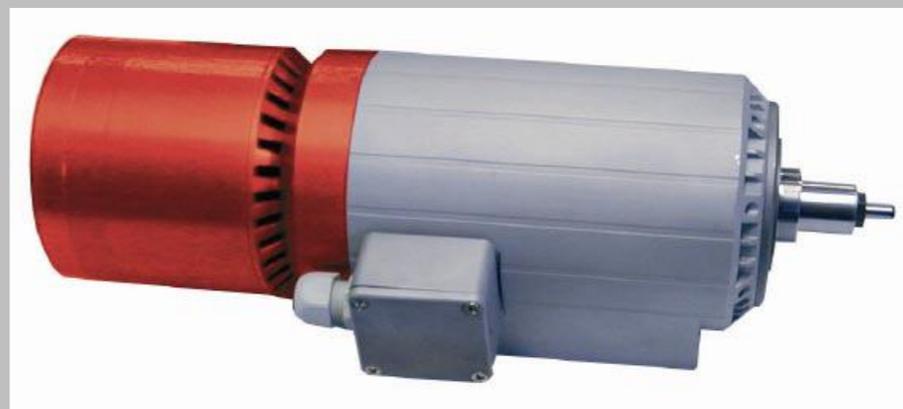
Max. Speed	30.000 rpm
<b>S1 Power</b>	<b>1,5 KW</b>
S6 Power	1,9 KW
<b>Pmax Power</b>	<b>4,1 KW</b>
Frequency	500 Hz
<b>Cooling</b>	<b>Fan-Cooled</b>
Tool Change	manual ER 16
<b>Max. Clamping</b>	<b>10mm</b>
E-Connection	Plug/box
<b>Taper Run out</b>	<b>3 microns</b>
Weight	6kg



**Jaeger**

# The Chopper 1500 D

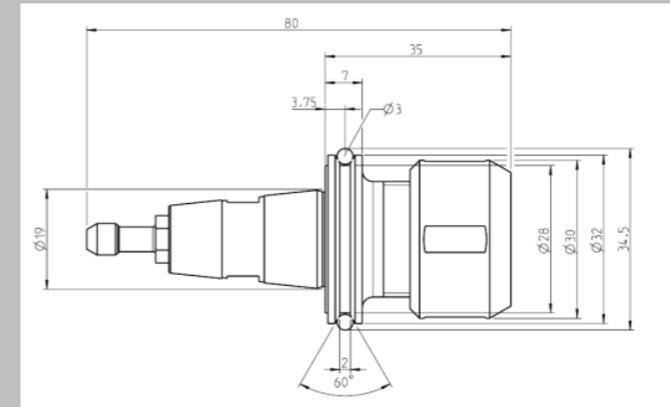
Max. Speed	30.000 rpm
<b>S1 Power</b>	<b>1,5 KW</b>
S6 Power	1,9 KW
<b>Pmax Power</b>	<b>4,1 KW</b>
Frequency	500 Hz
<b>Cooling</b>	<b>Fan-Cooled</b>
Tool Change	Pneumatic ATC 10/5° collet
<b>Max. Clamping</b>	<b>8 mm</b>
E-Connection	Plug/box
<b>Taper Run out</b>	<b>3 microns</b>
Weight	7kg



**Jaeger**

# The Chopper 1500 K

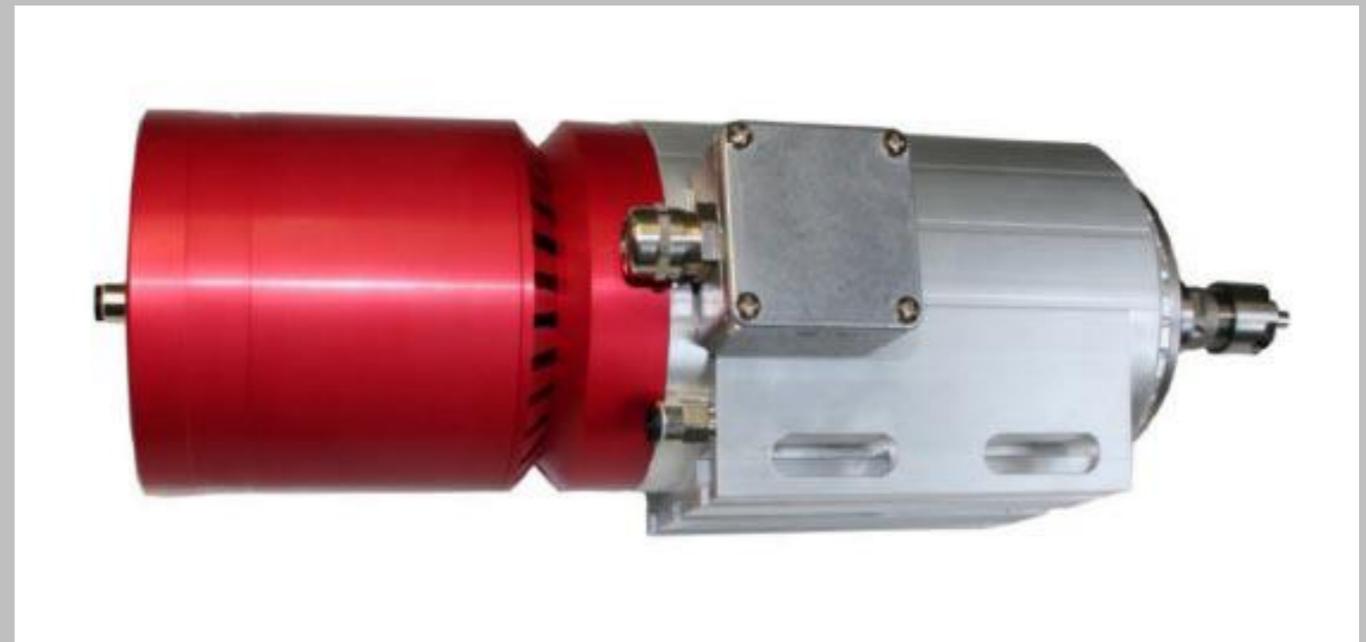
Max. Speed	30.000 rpm
<b>S1 Power</b>	<b>1,5 KW</b>
S6 Power	1,9 KW
<b>Pmax Power</b>	<b>4,1 KW</b>
Frequency	500 Hz
<b>Cooling</b>	<b>Fan-Cooled</b>
Tool Change	Pneumatic ATC 10 D collet / WK 19 Taper System
<b>Max. Clamping</b>	<b>10 mm</b>
E-Connection	Plug/box
<b>Taper Run out</b>	<b>3 microns</b>
Weight	7kg



**Jaeger**

# The Chopper 1500 HSK

Max. Speed	30.000 rpm
<b>S1 Power</b>	<b>1,5 KW</b>
S6 Power	1,9 KW
<b>Pmax Power</b>	<b>4,1 KW</b>
Frequency	500 Hz
<b>Cooling</b>	<b>Fan-Cooled</b>
Tool Change	Pneumatic ATC HSK-E 25 Taper System
<b>Max. Clamping</b>	<b>10 mm</b>
E-Connection	Plug/box
<b>Taper Run out</b>	<b>3 microns</b>
Weight	7kg



**Jaeger**

# The Chopper 2300 H

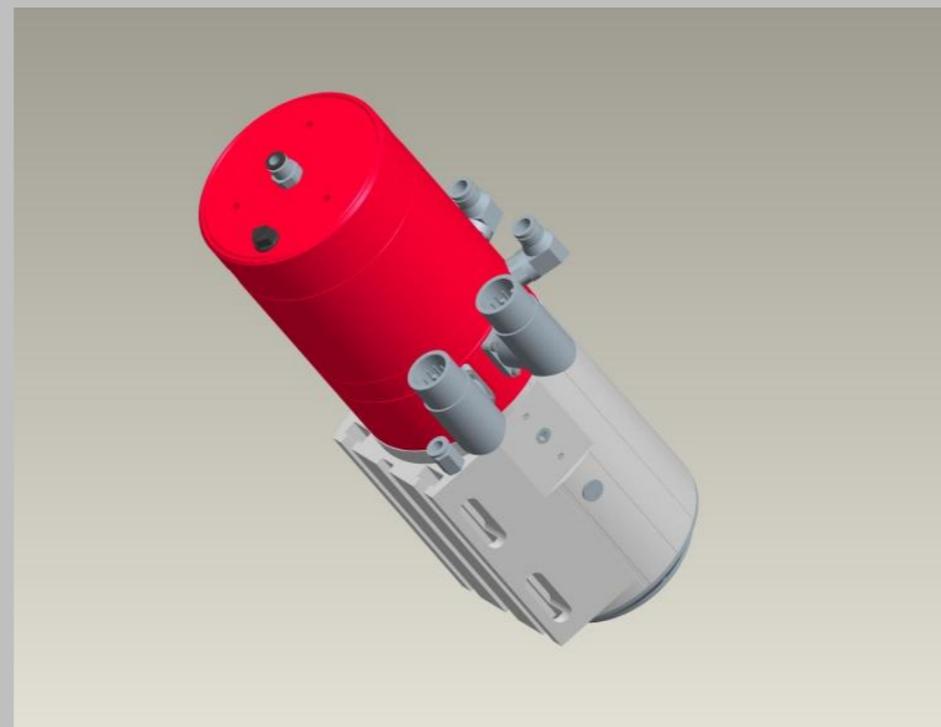
Max. Speed	40.000 rpm
<b>S1 Power</b>	<b>2,3 KW</b>
S6 Power	2,6 KW
<b>Pmax Power</b>	<b>3,5 KW</b>
Frequency	667 Hz
<b>Cooling</b>	<b>Water Cooled</b>
Tool Change	Manual ER 16
<b>Max. Clamping</b>	<b>10 mm</b>
E-Connection	Plug/box
Speed Monitor	Transmitter
<b>Taper Run out</b>	<b>2 microns</b>
Weight	7kg



**Jaeger**

# The Chopper 2300-40 HSK

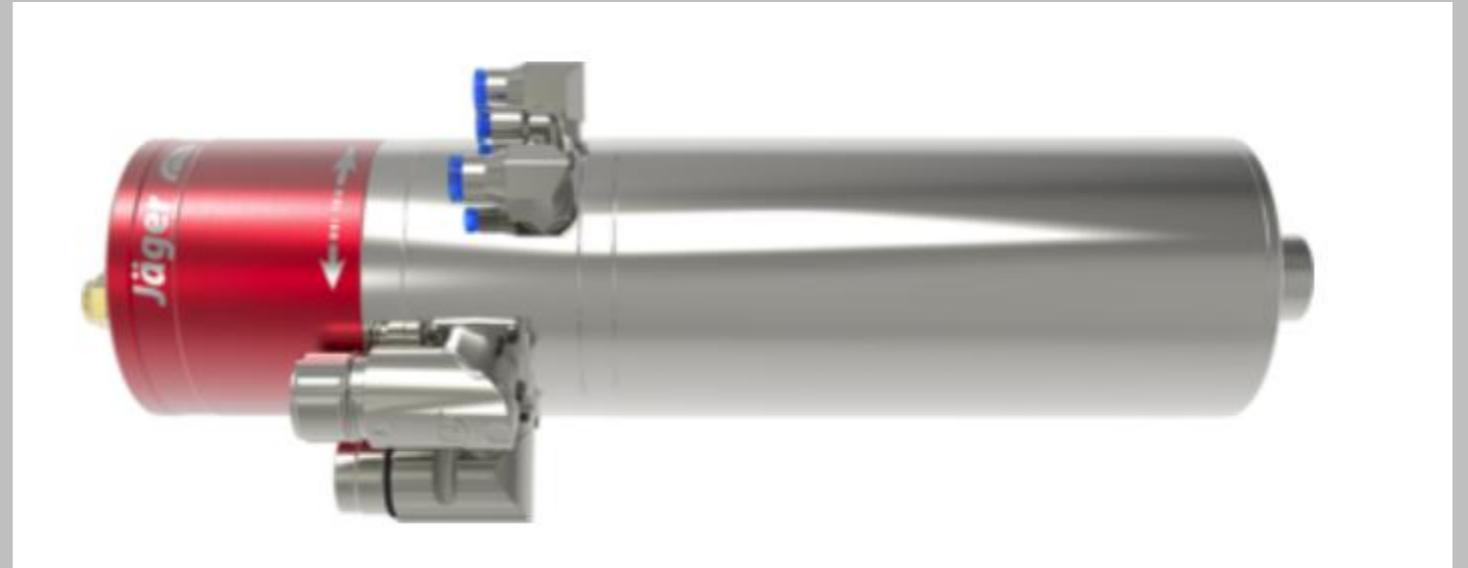
Max. Speed	40.000 rpm
<b>S1 Power</b>	<b>2,3 KW</b>
S6 Power	2,6 KW
<b>Pmax Power</b>	<b>3,5 KW</b>
Frequency	667 Hz
<b>Cooling</b>	<b>Water Cooled</b>
Tool Change	Pneumatic ATC HSK-E 25 Taper System
<b>Max. Clamping</b>	<b>10 mm</b>
E-Connection	Plug/box
<b>TCM (1 Position)</b>	<b>Inductive</b>
Speed Monitor	Transmitter
<b>Taper Run out</b>	<b>3 microns</b>
Weight	7kg



**Jaeger**

# The Chopper C80-H442.01 S5W2

Max. Speed	42.000 rpm
<b>S1 Power</b>	<b>3,4 KW</b>
S6 Power	4,1 KW
<b>Pmax Power</b>	<b>5,5 KW</b>
Frequency	700 Hz
<b>Cooling</b>	<b>Water Cooled</b>
Tool Change	Pneumatic HSK-E25
<b>Max. Clamping</b>	<b>10 mm</b>
E-Connection	Plug
<b>Taper Run out</b>	<b>2 microns</b>
Weight	6,5kg



**Jaeger**

# The Chopper C80-M430/C80-M440

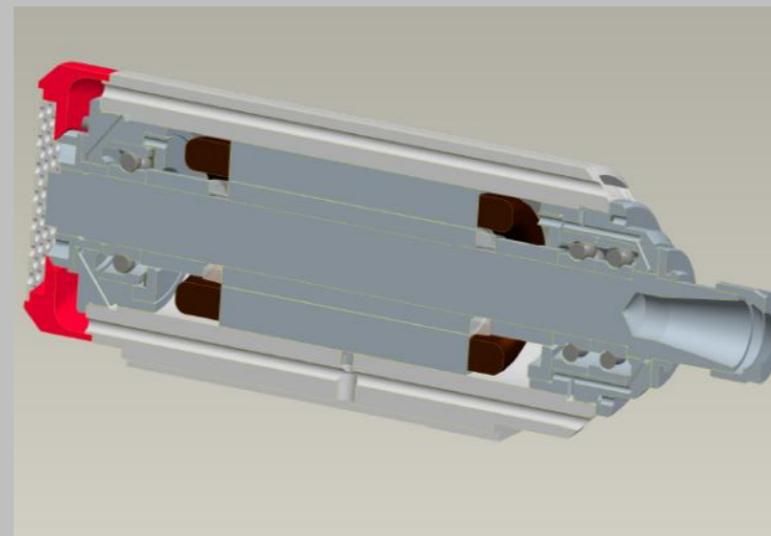
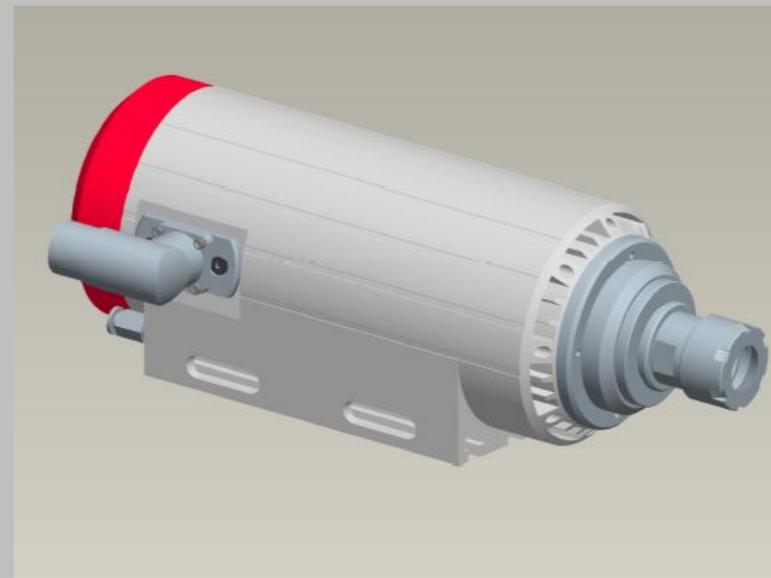
Max. Speed	30.000 rpm/40,000rpm
<b>S1 Power</b>	<b>2,0 KW</b>
S6 Power	2,6 KW
<b>Pmax Power</b>	<b>5,8 KW</b>
Frequency	500 Hz
<b>Cooling</b>	<b>Water Cooled</b>
Tool Change	Manual / Collet 12 D
<b>Max. Clamping</b>	<b>12 mm</b>
E-Connection	Plug
<b>Taper Run out</b>	<b>3 microns</b>
Weight	5,5kg



**Jaeger**

# The Chopper 3300 H

Max. Speed	30.000 rpm
Voltage	380V
S1 Power	3,3 KW
<b>S6 Power</b>	<b>4,5 KW</b>
S6/5s Power	7,5 KW
<b>Frequency</b>	<b>500 Hz</b>
Cooling	Fan Cooled
<b>Tool Change</b>	<b>Manual / Collet ER 25</b>
Max. Clamping	16 mm
<b>E-Connection</b>	<b>Plug</b>
Taper Run out	3 microns
<b>Weight</b>	<b>7,4 kg</b>



**Jaeger**

# The Chopper 3300 HSK S5

Max. Speed	30.000 rpm
Voltage	380V
S1 Power	3,3 KW
<b>S6 Power</b>	<b>4,5 KW</b>
S6/5s Power	7,5 KW
<b>Frequency</b>	<b>500 Hz</b>
Cooling	Fan Cooled
<b>Tool Change</b>	<b>Pneumatic ATC HSK-E32</b>
Max. Clamping	13 mm
<b>E-Connection</b>	<b>S5 Plug</b>
Taper Run out	2 microns
<b>Weight</b>	<b>9,4 kg</b>



**Jaeger**

# The Chopper 5000 H

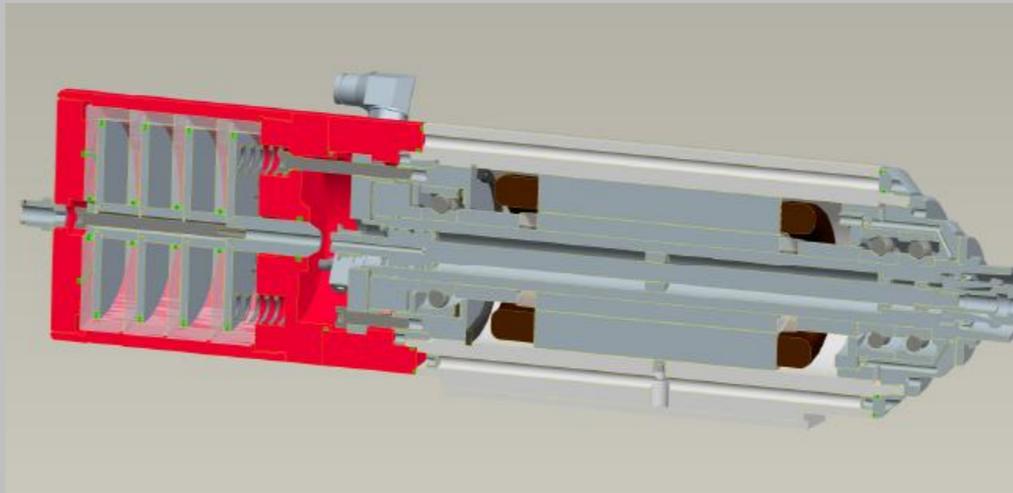
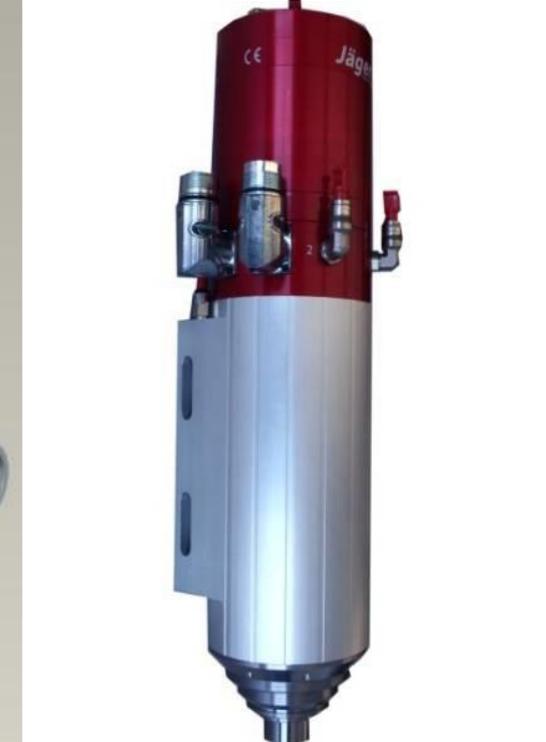
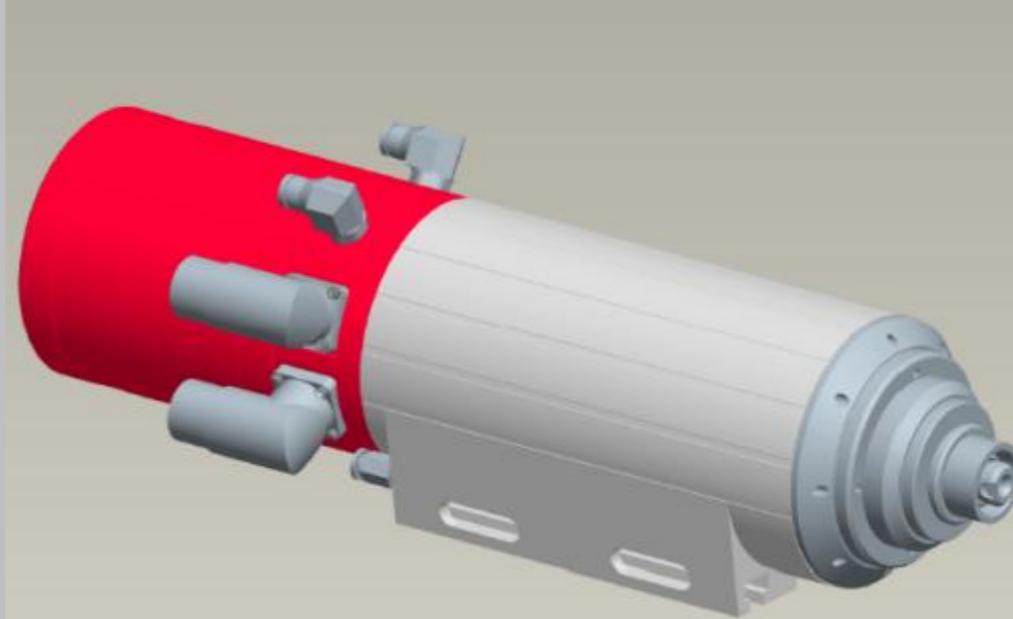
Max. Speed	30.000 rpm
<i>Voltage</i>	380V
S1 Power	5,0 KW
<b>S6 Power</b>	<b>6,5 KW</b>
S6/5s Power	7,5 KW
<b>Frequency</b>	<b>500 Hz</b>
Cooling	Water Cooled
<b>Tool Change</b>	<b>Manual ER25</b>
Max. Clamping	16 mm
<b>E-Connection</b>	<b>Plug</b>
TCM (1 Position)	Inductive
<b>Speed Monitor</b>	<b>Transmitter</b>
Taper Run out	3 microns
<b>Weight</b>	<b>9,4 kg</b>



**Jäger**

# The Chopper 5000 HSK S5

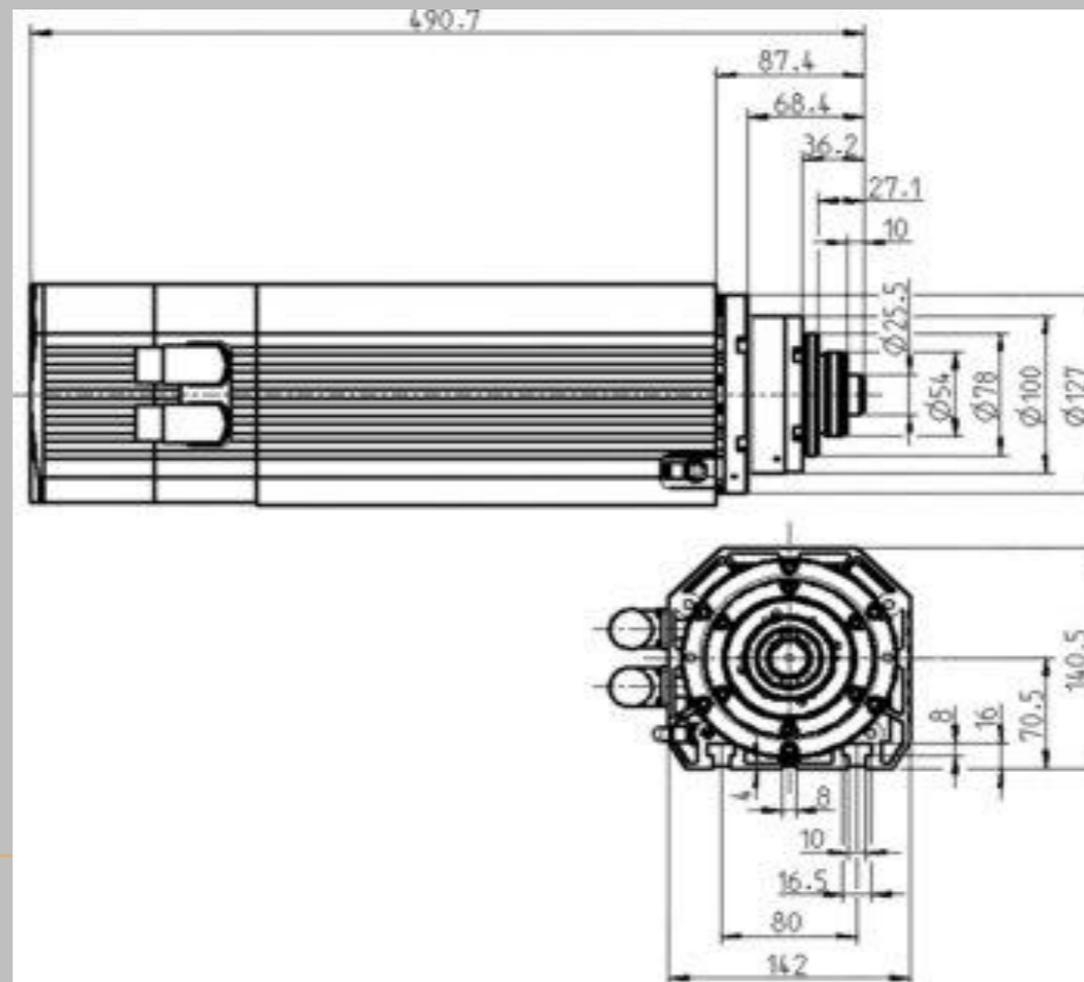
Max. Speed	30.000 rpm
Voltage	380V
S1 Power	5,0 KW
<b>S6 Power</b>	<b>6,5 KW</b>
S6/5s Power	7,5 KW
<b>Frequency</b>	<b>500 Hz</b>
Cooling	Water Cooled
<b>Tool Change</b>	<b>Pneumatic ATC HSK-E 32</b>
Max. Clamping	13 mm
<b>E-Connection</b>	<b>Plug</b>
TCM (1 Position)	Inductive
<b>Speed Monitor</b>	<b>Transmitter</b>
Taper Run out	3 microns
<b>Weight</b>	<b>9,4 kg</b>



**Jaeger**

# Chopper 6500 H

Max. Speed	24.000 rpm
Voltage	350V
S1 Power	6,5 KW
<b>S6 Power</b>	<b>8,0 KW</b>
Pmax Power	9,0 KW
<b>Frequency</b>	<b>800 Hz</b>
Cooling	Fan Cooled
<b>Tool Change</b>	<b>Manual Taper HSK-C50</b>
Max. Clamping	20 mm
<b>E-Connection</b>	<b>Plug</b>
TCM (2 Position)	Inductive
<b>Speed Monitor</b>	<b>Transmitter</b>
Taper Run out	3 microns
<b>Weight</b>	<b>33kg</b>



**Jaeger**

# Chopper 6500 ISO/HSK

Max. Speed	24.000 rpm
Voltage	350V
S1 Power	6,5 KW
<b>S6 Power</b>	<b>8,0 KW</b>
Pmax Power	9,0 KW
<b>Frequency</b>	<b>800 Hz</b>
Cooling	Fan Cooled
<b>Tool Change</b>	<b>Pneumatic ATC ISO/BT 30/HSK</b>
Max. Clamping	20 mm
<b>E-Connection</b>	<b>Plug</b>
TCM (2 Position)	Inductive
<b>Speed Monitor</b>	<b>Transmitter</b>
Taper Run out	3 microns
<b>Weight</b>	<b>33kg</b>



**Jaeger**

# Chopper 6500 ISO/HSK

ATE Antriebstechnik und Entwicklungs GmbH  
 Brandenburger Straße 10  
 D-88299 Leubüch in Allgäu

Phone: +49 (0)7561 9854-0  
 Fax: +49 (0)7561 9854-22  
 e-mail: info@ate-system.de  
 website: www.ate-system.de

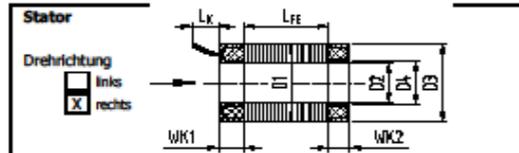
## Technisches Datenblatt AC – Motorelement



Nr. 125 0043 300

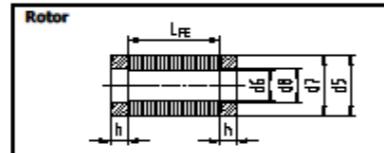
AC 106 / 150 / 4

Jäger



	L <sub>FE</sub> [mm]	WK1 <sub>max</sub> [mm]	WK2 <sub>max</sub> [mm]	D1 [mm]	D2 [mm]	D3 [mm]	D4 <sup>*)</sup> [mm]
Lieferabmessungen	150	29	27	-	65	=D1	66
Endabmessungen <sup>1)</sup>	-	-	-	106,0	-	=D1	-

	L <sub>K</sub> [mm]	U1 [mm <sup>2</sup> ]	V1 [mm <sup>2</sup> ]	W1 [mm <sup>2</sup> ]	U2 [mm <sup>2</sup> ]	V2 [mm <sup>2</sup> ]	W2 [mm <sup>2</sup> ]
Motor- Litzen	300	1,5	1,5	1,5	1,5	1,5	1,5
Aussen Ø [mm]		braun	blau	schw.	violett	weiss	grau
				2,2			



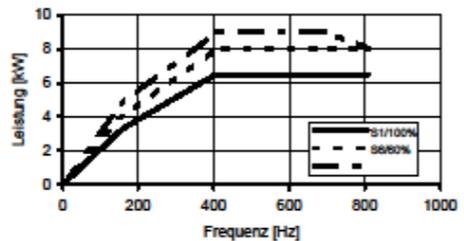
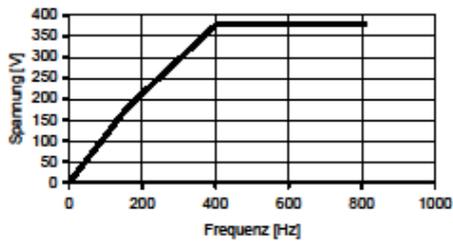
	d5 <sup>2)</sup> [mm]	d6 [mm]	d7 [mm]	d8 [mm]	h <sup>3)</sup> [mm]	L <sub>FE</sub> [mm]
	65	27	63	40	-	150
	64,4	29-35	-	-	6	-

<sup>1)</sup> Endbearbeitung durch Kunden <sup>2)</sup> Werte in Klammern für  
<sup>3)</sup> Toleranz Rotor Ø: h6 zusätzliche Armierung  
 weichmagn. Wellenwerkstoff    
 Käfigwerkstoff Al  Cu   
 Max. Umfangsgeschwindigkeit: 81,9 m/s

- Kühlung**
- Wasserkühlung
  - Ölkühlung
  - Pressluftkühlung
  - Lüfterkühlung
  - ungekühlt
- Wicklungsschutz**
- 1 PTC 130°
  - 2 KTY 84 -130
  - Thermoschalter 130°C
  - NTC K227
  - PT3C-51F-F1

- Imprägnierung**
- Umguss
- Isolationsklasse**
- F Wicklung
  - H Litzen
- Statorgehäuse/Kühlhülse**
- Stahl
  - Aluminium

Phasenschaltung	Y											
	S1/100%				S6/60%				S6 max. 5s Lastdauer			
Betriebsart												
Spannung [V]	180	380	380	380	180	380	380	380	180	380	380	380
Strom [A]	16	14	14	14	18	17	17	18	22	19	20	18
Frequenz [Hz]	160	405	700	810	160	405	700	810	160	405	700	810
Drehzahl [1/min]	4600	11940	20590	23800	4550	11880	20470	23620	4475	11841	20360	23624
Leistung [kW]	3,3	6,5	6,5	6,5	4	8	8	8	4,8	9	9	8
Spitzenleistung [kW]	8,4	21,5	12,5	10,6	8,4	21,5	12,5	10,6	8,4	21,5	12,5	10,6
Drehmoment [Nm]	6,9	5,2	3,0	2,6	8,4	6,5	3,7	3,2	10,2	7,3	4,3	3,2



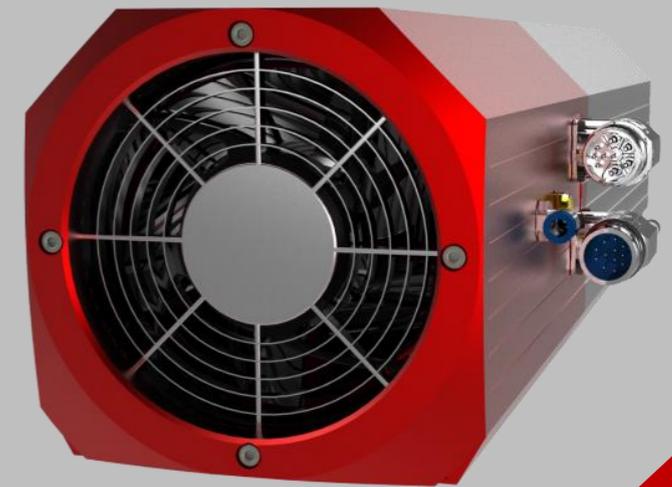
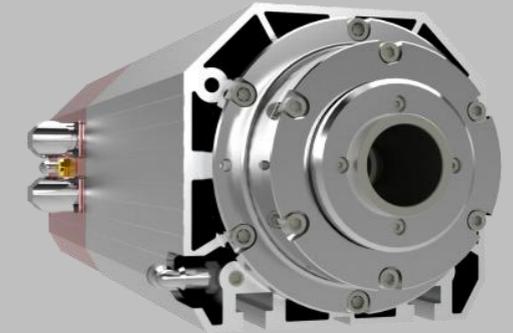
Die angegebenen Daten treffen für sinusförmige Spannungen und Ströme zu.  
 Bei Frequenzrichterbetrieb muss die effektive Grundwellenspannung der angegebenen Motorspannung entsprechen.  
 Außerdem können gemessene Ströme aufgrund des Oberwellenanteils grösser sein.

ATE Motorelemente sind Komponenten für die Herstellung von Asynchronmotoren. Nach Komplettierung des Motors (Einbau in Gehäuse) muss nach IEC 34-1 und den jeweils geltenden Normen eine Prüfung durchgeführt werden.

Der Spindelhersteller ist dafür verantwortlich, den problemlosen Betrieb des Motors mit dem Umrichterhersteller im Vorfeld abzuklären.

Bem.: Leistung kühlungsabhängig.

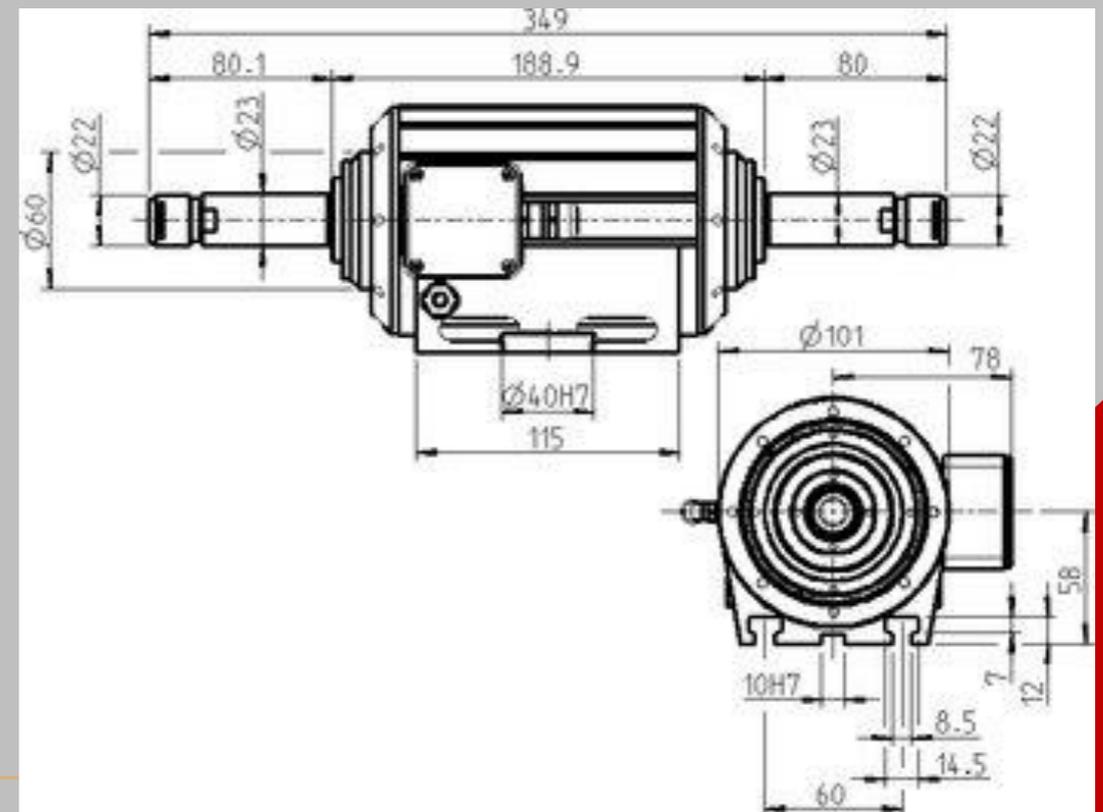
<sup>\*)</sup> Stufe am Innendurchmesser des Stators ist Referenz für das Einschrumpfen in die Kühlhülse



# Jäger

# Chopper C100

Max. Speed	30.000 rpm
Voltage	200V
S1 Power	2,3 kW * (1,5 kW **)
<b>S6 Power</b>	<b>2,6 kW *</b> <b>(1,9 kW **)</b>
Pmax Power	2,3 kW * (1,5 kW **)
Frequency	<b>500 Hz</b>
Cooling	<ul style="list-style-type: none"><li>*Liquid</li><li>** Air compressed</li></ul>
Tool Change	<b>Manual ER16</b>
Max. Clamping	10 mm
E-Connection	<b>Plug</b>
Taper Run out	2 microns
Weight	<b>9,0kg</b>



**Jaeger**