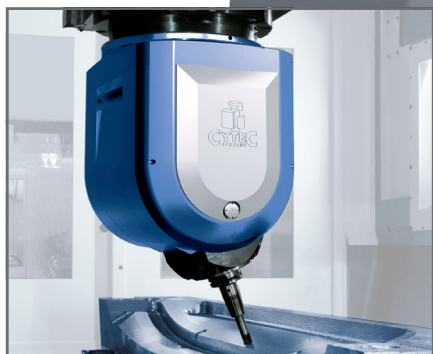
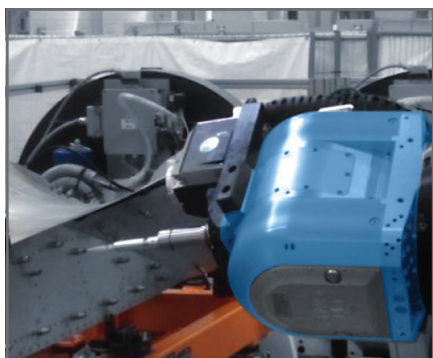




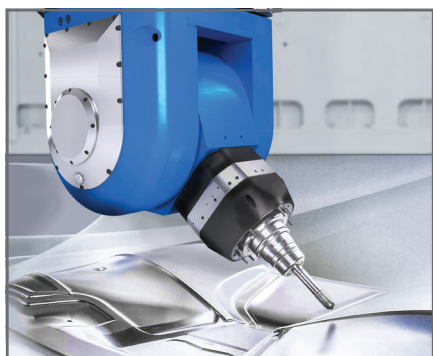
NANO



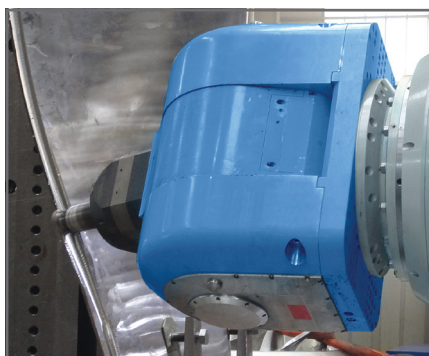
S8



S8 XL



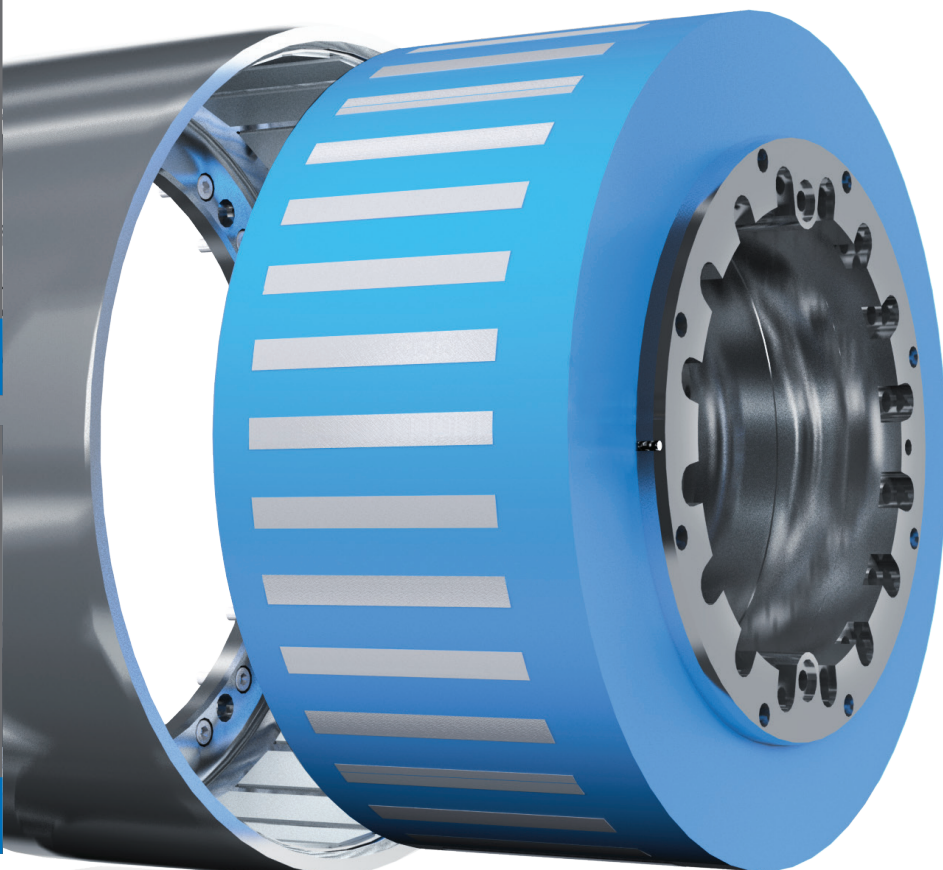
M21



M21 XL



G30



**MILLING HEADS WITH NEW
GENERATION TORQUE DRIVES**

• **EXTENDED POWER DENSITY**



Head Series	NANO	S8	S8 XL	M21	M21 XL	G30
A axis						
Rated/max. torque [Nm]:	(82/164*)/154/308**	400/770	550/1190	710/1340	1120/2000	1610/3130
Clamping torque [Nm]:	600	1500	2400	4000	5000	7000
Swivel angle "A" [°]:	± 110	± 110	± 110	± 110	± 110	± 95
Measuring system:	absolute	absolute	absolute	absolute	absolute	absolute
Positioning accuracy ["]:	± 2,5	± 5	± 5	± 5	± 2,5	± 2,5
C axis						
Rated/max. torque [Nm]:	155/178	430/820	670/1300	780/1530	1000/1950	1950/3700
Clamping torque [Nm]:	700	1400	2400	4000	5000	7000
Swivel angle [°]:	± 360	± 360	± 360	± 360	± 360	± 360
Measuring system:	absolute	absolute	absolute	absolute	absolute	absolute
Positioning accuracy ["]:	± 2,5	± 2	± 2	± 2	± 2	± 2
Total weight approx. [kg]:	195	350	450	750	900	1200

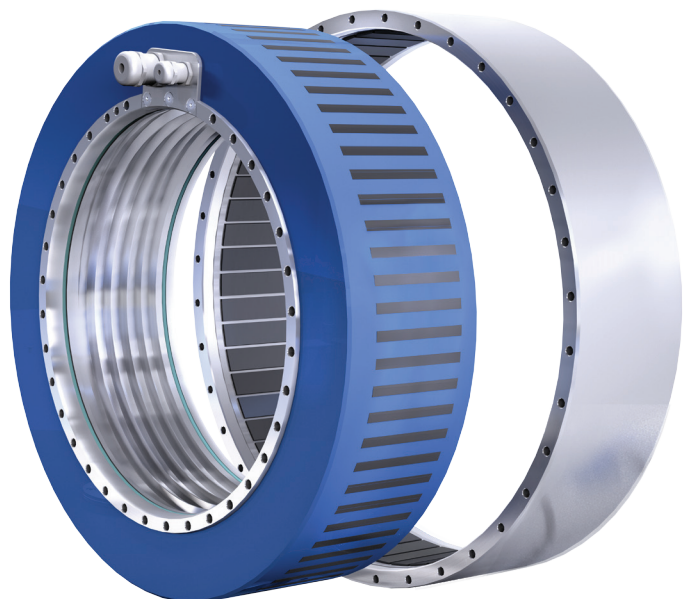
*single motor, **double motor

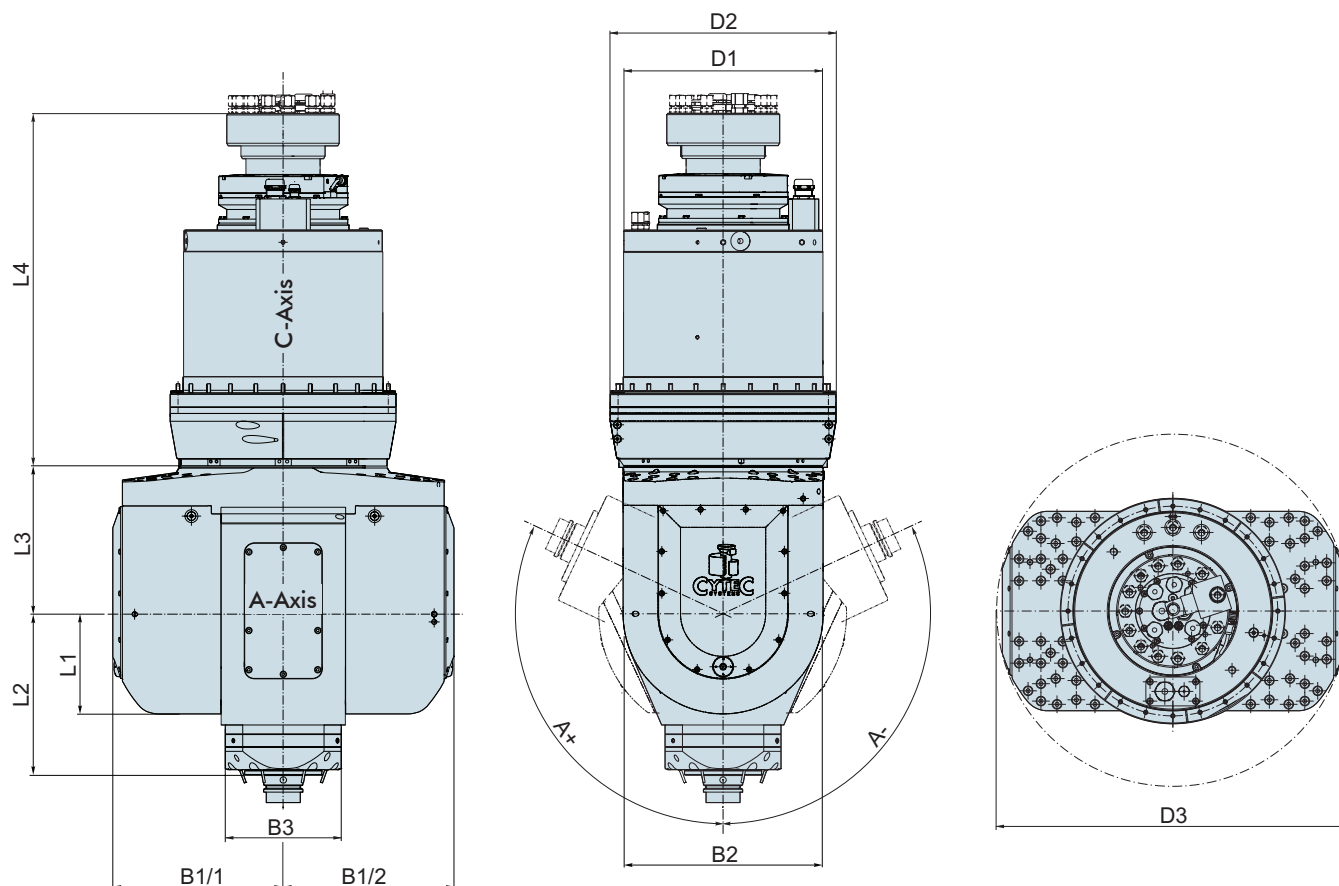
Extended dynamic and power

The core of the direct drive milling heads is the new torque motor generation: The sophisticated cooling technology of the coils offers 30% more power, very high efficiency and dynamic.

Using these advantages, CyTec engineers increase power and torque of the milling head for high efficient simultaneous machining at the same time.

As a result, it is possible to reach a new level of high dynamic milling.





Head Series	NANO	S8	S8 XL	M21	M21 XL	G30
Dimensions [mm]						
D1:	220	310	310	335	335	380
D2:	250	350	350	□400	□400	□460
B1/1:	187,5	225	265	284	309	332,5
B1/2:	187,5	225	265	271	309	332,5
B2:	260	310	310	400	400	522
B3:	150	160	180	200	220	280
L1:	130	155	155	200	200	261
L2:	180	220	250	310 (385)	385	350 (450)
L3:	205	230	343	290	290	376
L4:	329,5	453	553	807	807	826
D3:	394	476	580	588	652	730

NANO	
Spindle model:	CS-15-135-S
Power S1 [kW]:	15
Power S6 [kW]:	19
Torque S1 [Nm]:	24
Torque S6 [Nm]:	31
Speed max. [rpm]:	24000
Tool interface:	HSK-A63

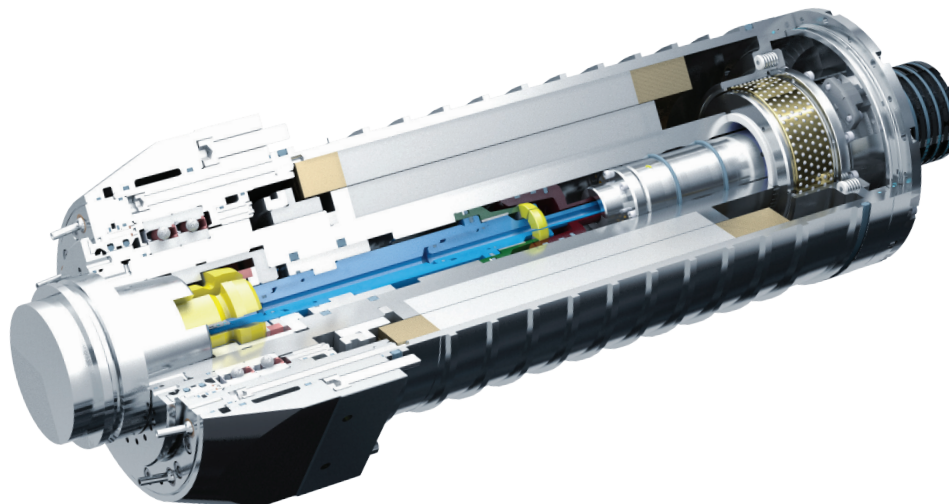
S8	
CS-18-135-S	CS-20-135
18	20
23	26
56	33
72	56
18000	24000
HSK-A63	HSK-A63

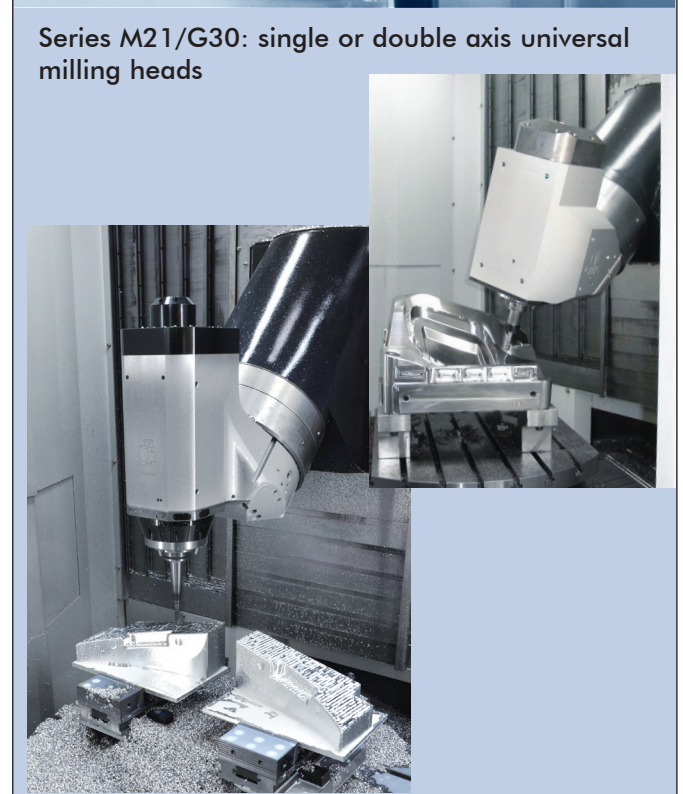
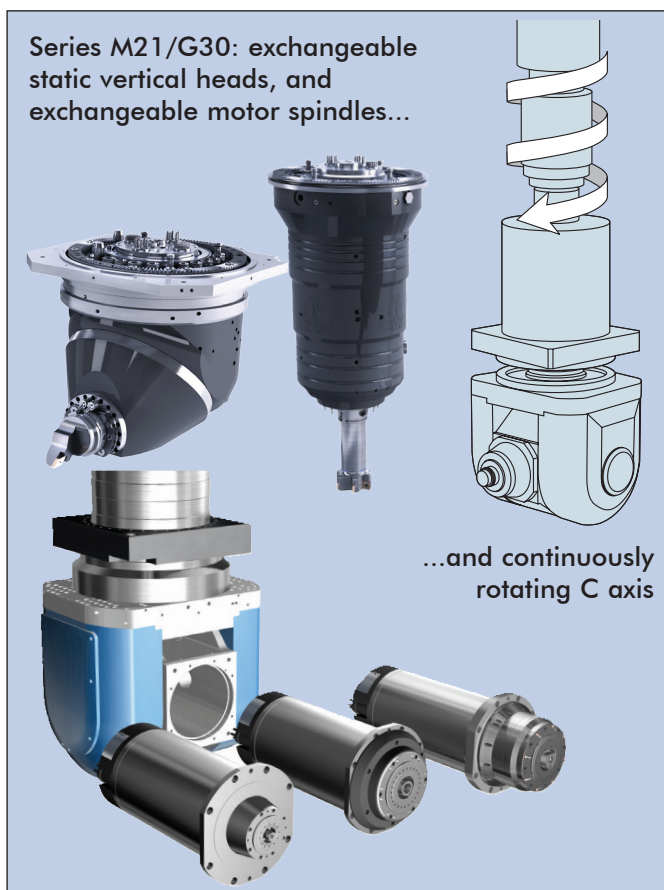
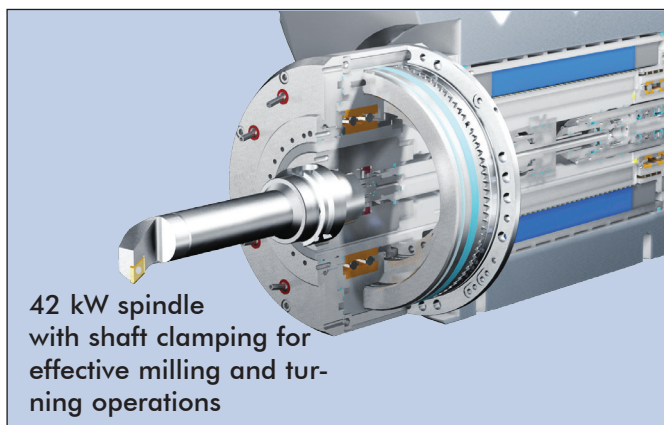
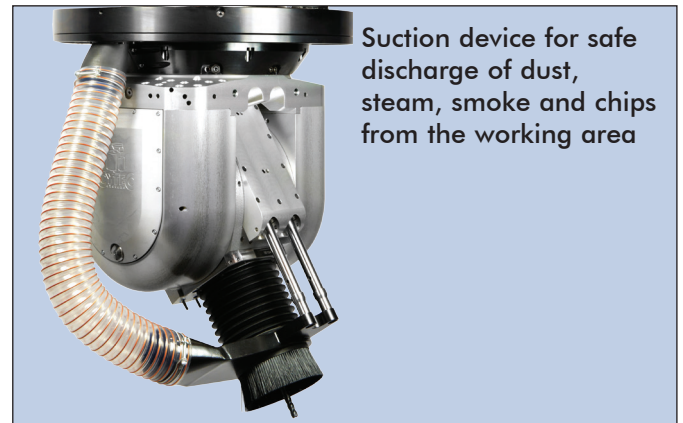
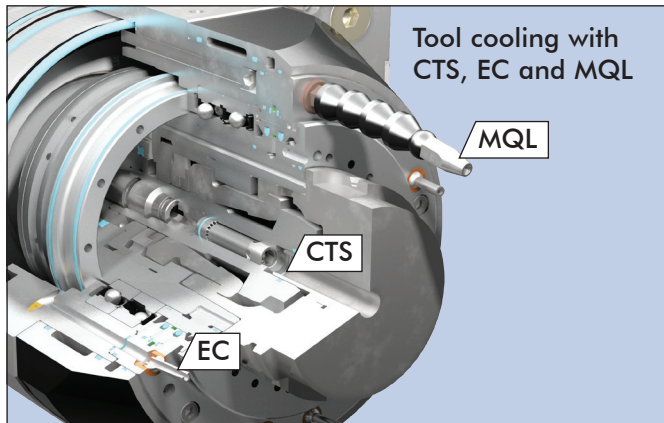
S8 XL
CS-40-160-S
40
51
67
85
24000
HSK-A63

M21							
Spindle model	CS-21-180	CS-27-180-S	CST-27-180	CS-34-180	CS-34-180-S	CST-42-180-S	CS-60-180-S
Power S1 [kW]:	21	27	27	34	34	42	60
Power S6 [kW]:	27	32	32	43	43	53	80
Torque S1 [Nm]:	100	130	130	72	170	201	82
Torque S6 [Nm]:	130	170	170	91	220	253	109
Speed max. [rpm]:	18000	12000	10000	24000	12000	10000	22000
Tool interface:	HSK-A63	HSK-A100 (63)	HSK-T63 (100)	HSK-A63	HSK-A100	HSK-T100	HSK-A63

M21 XL	
Spindle model:	CS-40-200 CS-50-200
Power S1 [kW]:	40 50
Power S6 [kW]:	50 64
Torque S1 [Nm]:	160 240
Torque S6 [Nm]:	200 300
Speed max. [rpm]:	15000 8000
Tool interface:	HSK-A100 HSK-A100

G30	
CS-42-238-S	CS-50-238
42	50
55	63
400	248
525	315
8000	15000
HSK-A100	HSK-A100







CyTec Zylindertechnik GmbH is a German multinational company that serves the market with high tech fabrication machine parts.

For over 30 years, CyTec develops and produces components, such as cylinders, clamping systems, motor spindles, milling heads, turning and rotary tables at the highest standards.

Due to the well-engineered components, CyTec is the holder of several patents regarding its products.

CyTec Zylindertechnik GmbH was founded 1984 as a specialist for locking cylinders. It continuously advanced and established itself in the range of machine and tool clamping technology. With the introduction of the HSK tool interface in 1994, CyTec in cooperation with a well-known German machine tool manufacturer created motor spindles as a new product range. This was the basis for the setup of CyTec's core competencies as a manufacturer of motor spindles.

In 2002 the first two axis fork milling head with torque motors as direct drives was presented. This technology can be found in more than thousand rotating machining axes to this day.

Today the core competencies have enhanced to the product range of fork milling heads. All components such as bearings, rotary unions, swivel brackets, axis clamping and energy couplers are designed and produced in house. The new milling head generation becomes even more compact with simultaneously increased power. The brand new type "NANO" achieves 15 kW drive power and significant system rigidity, and that with just the dimensions of a household microwave.