



ROMI[®] G Series

Turning Centers
Technical features



G 30
G 30M

G 50
G 50M

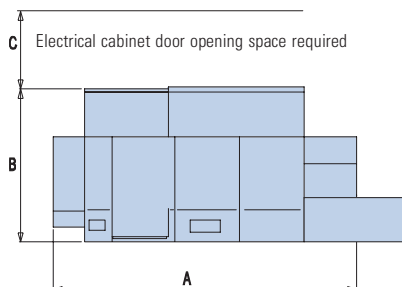
Remark: CE safety regulation compliance for Europe Community only

G Series

Technical Features

Standard specifications		G 30		G 30M		G 50		G 50M	
Capacity									
Swing over Z axis cover	mm / in	580 / 22.83		580 / 22.83		660 / 25.98		660 / 25.98	
Maximum cutting diameter	mm / in	320 / 12.59		320 / 12.59		550 / 21.65		382 / 15.04	
Maximum cutting length	mm / in	1,020 / 40.15		1,020 / 40.15		710 / 27.95	1,300 / 51.18	1,300 / 51.18	
Travel (X axis)	mm / in	255 / 10.03		255 / 10.03		280 / 11.02		280 / 11.02	
Travel (Z axis)	mm / in	1,020 / 40.15		1,020 / 40.15		710 / 27.9	1,300 / 51.2	1,300 / 51.18	
Headstock		Standard	High Torque	Standard	High Torque	Standard	High Torque	Standard	High Torque
Spindle nose	ASA	A2-8"	A2-8"	A2-8"	A2-8"	A2-8"	A2-11"	A2-8"	A2-11"
Spindle hole diameter	mm / in	80 / 3.15	104 / 4.09	80 / 3.15	104 / 4.09	104 / 4.09	137 / 5.39	104 / 4.09	137 / 5.39
Hydraulic chuck diameter	mm / in	254 / 10	315 / 12.40	254 / 10	315 / 12.40	315 / 12.40	400 / 15.74	315 / 12.40	400 / 15.74
Bar capacity	mm / in	65 / 2.55	90 / 3.54	65 / 2.55	90 / 3.54	90 / 3.54	115 / 4.52	90 / 3.54	115 / 4.52
Speed range	rpm	3 to 3,000	2 to 2,500	3 to 3,000	2 to 2,500	2 to 2,000	1 to 630 / 2 to 2,000	2 to 2,000	1 to 630 / 2 to 2,000
C axis									
Minimal increment	degree	-		0.001		-		0.001	
Maximum speed	rpm	-		300		-		400	
Feeds									
Rapid traverse (X axis)	mm / ipm	18 / 708		18 / 708		18 / 708		18 / 708	
Rapid traverse (Z axis)	mm / ipm	24 / 945		24 / 945		24 / 945		24 / 945	
Accuracy									
Positioning (X axis)	mm / in	0,004 / 0.000157		0,004 / 0.000157		0,004 / 0.000157		0,004 / 0.000157	
Positioning (Zaxis)	mm / in	0,008 / 0.000315		0,008 / 0.000315		0,008 / 0.000315		0,008 / 0.000315	
Repeatability (X axis)	mm / in	0,002 / 0.0000787		0,002 / 0.0000787		0,002 / 0.0000787		0,002 / 0.0000787	
Repeatability (Z axis)	mm / in	0,004 / 0.000157		0,004 / 0.000157		0,004 / 0.000157		0,004 / 0.000157	
Tool Turret									
Type		servodriven / hydraulic clamp		servodriven / hydraulic clamp		servodriven / hydraulic clamp		servodriven / hydraulic clamp	
Number of stations	un	12		12		12		12	
Number of tools		Romi		VDI - 40		Romi		VDI - 50	
Tool section: square	mm / in	25 x 25 / 1 x 1		25 x 25 / 1 x 1		32 x 32 / 1 1/4 x 1 1/4		32 x 32 / 1 1/4 x 1 1/4	
Tool section: bar (diameter)	mm / in	50 / 2		40 / 1.6		50 / 2		50 / 2	
Radial and axial driven tool holder	DIN 6499			ER 32 (Ø 2 - Ø 20 mm)				ER 40 (Ø 3 - Ø 26 mm)	
Speed range (driven tool)	rpm	-		4 to 4,000		-		3 to 3,000	
Index time: next tool (incl. unclamp and clamp)	s	0.6		0.52		0.7		0.64	
Index time: 180°	s	1.2		0.82		1.9			
Tailstock (optional)									
Tailstock body travel	mm / in	835 / 32.87		835 / 32.87		543 / 21.37	1,143 / 45.00	1,143 / 45.00	
Quill travel	mm / in	130 / 5.11		130 / 5.11		130 / 5.11		130 / 5.11	
Quill diameter	mm / in	100 / 3.93		100 / 3.93		120 / 4.72		120 / 4.72	
Tailstock body positioning		automatic		automatic		automatic		automatic	
Quill activation		hydraulic		hydraulic		hydraulic		hydraulic	
Quill taper hole	MT	4 with built in live center		4 with built in live center		5 with built in live center		5 with built in live center	
Electrical specification									
AC spindle motor (30 min)	kW/hp	30 / 22		30 / 22		50 / 37		50 / 37	
Power consumption	KVA	40		40		60		60	
Dimensions and weights (approximate)									
Floor space required	m / in	4,3 x 1,9 / 169.29 x 74.80		4,3 x 1,9 / 169.29 x 74.80		3,7 x 2,2 / 145.66 x 86.61 5,1 x 2,2 / 200.78 x 86.61		3,7 x 2,2 / 145.66 x 86.61 5,1 x 2,2 / 200.78 x 86.61	
Net weight	kg / lbs	6,300 / 13,889		6,300 / 13,889		7,200 / 15,873		7,200 / 15,873	

Machine dimensions - mm / inches



		A	B	C
G 30	m / in	4,3 / 169.29	1,9 / 74.80	0,58 / 22.83
G 30M	m / in	4,3 / 169.29	1,9 / 74.80	0,58 / 22.83
G 50 (710 mm / 28")	m / in	3,7 / 145.66	2,2 / 86.61	0,90 / 35.43
G 50 (1,300 mm / 51.2")	m / in	5,1 / 200.78	2,2 / 86.61	0,90 / 35.43
G 50M (710 mm / 28")	m / in	3,7 / 145.66	2,2 / 86.61	0,90 / 35.43
G 50M (1,300 mm / 51.2")	m / in	5,1 / 200.78	2,2 / 86.61	0,90 / 35.43



Standard equipment

- 12-station programmable Romi turret, servomotor driven with hydraulic clamping
- Automatic lubrication system with line filter
- Bar feeder interface
- CE safety regulation compliance
- Chip conveyor interface
- Complete coolant system, pump with 10 l/m / 2.6 gpm - 2 bar / 29 psi - 0,18 kW / 0,24 hp
- Cover cleaning system, using coolant flow from separated pump (10 l/m / 2.6 gpm - 1.7 bar / 24.65 psi - 0,12 kW / 0,16 hp) (G 30 / 50)
- Electrical installation with 8 tap auto-transformer for 200/210 - 220/230 - 240/250 - 360/380 - 390/410 - 420/440 - 460/480 V, 50/60 Hz (for CE market)
- Electrical installation for 230 V, 50/60 Hz (for USA market)
- Fully enclosed splash guard
- GE-Fanuc Control Series 21i-T, with 10.4" color monitor
- Hydraulic operated 3 jaw chuck with one set of soft jaws
- Hydraulic power unit
- Interlocked sliding door
- Removable chip box
- Sealed worklight
- Set of levelling screws, nuts and levelling support plates
- Set of operating and maintenance manuals
- Set of wrenches for machine operation
- Standard colors: Munsell blue 10B 3/4 and gray RAL 7035

Accessories

- 8 tap auto-transformer for 200/210 - 220/230 - 240/250 - 360/380 - 390/410 - 420/440 - 460/480 V, 50/60 Hz (for USA market)
 - Automatic door
 - Bar feeder
 - Bar guide flanges
 - Bar guides tubes (A)
 - Bar puller
 - Chip conveyor (TCE / TCA / TCM)
 - Chuck cleaning system using air blast
 - Collet chuck in place of standard chuck (B)
 - Cover cleaning system
 - Extra collets
 - Extra jaws set
 - Extra tool holders and reduction sleeves
 - Foot switch for hydraulic chuck
 - High pressure coolant pump (10 l/min / 2.6 gpm - 7 bar / 101.5 psi - 1.5 kW / 2 hp motor)
 - High pressure coolant pump (10 l/min / 2.6 gpm - 15 bar / 217.5 psi - 3 kW / 4 hp motor)
 - Linear scale (X axis)
 - Mist exhausting system
 - Parts catcher
 - Status light indicator
 - Steady rest
 - Tailstock with hydraulic driven quill, automatic body positioning (G 30 / G 50)
 - Tool holder kit in inches in place of standard
 - Tool setter
 - Twin foot switch for hydraulic chuck and tailstock quill
 - VDI turret system in place of standard
 - Wash gun
- (A) Requires guide tubes adaptation
(B) Without guide tubes

CNC GE Fanuc - 21i-TB



Operation

- Manual continuous feed (JOG)
- Spindle JOG
- Manual coolant system command
- Program block search
- Reference cycles
- Background editing
- Registered program 63
- Block skip
- Single block
- Automatic operation
- End of program (M02, M30)
- Emergency stop
- Part program directory (number and name)
- Part program load / save
- Electronic handwheel (MPG)
- MDI operation
- Program stop (M00, M01)
- Feedhold
- Optional program stop (M01)
- Memory card interface (PCMCIA)
- Dry run
- Program test
- Extended part program editing function
- Sub-programs

- Data protection key
- Machining data screen

Axes

- Cutting feed (A)
- Feed mode in increments per minute (G94)
- Feed mode in increments per revolution (G95)
- Feedrate override (0% to 200%)
- Least input increment: 0,001 mm
- Linear interpolation (G00, G01)
- Maximum programmable value: 8 digits
- Multi-quadrant circular interpolation (G02, G03)
- Rapid traverse (A)
- Spindle override: 50% - 120%

Programming

- Absolute programming (G90) / incremental programming (G91)
- Canned cycle for drilling (G80, G83, G85)
- Chuck and tailstock barrier
- Constant lead threading (G33)
- Constant surface speed control (G96)
- Continuous thread cutting (G33)
- Coordinate system (work shift)
- Custom macro B (parametric programming)
- Decimal point programming
- Diameter and radius programming
- Direct drawing dimension programming
- Direct spindle speed (G97)
- Dwell
- End face peck drilling cycle (G74)
- External / internal roughing cycle (G77)
- Facing cycle (G 79)
- G code family A, B, C
- Inch (G21) / metric (G20) mode
- Local workpiece coordinate system (G52)
- Miscellaneous function (M codes)
- Multiple repetitive cycle (contouring - (G73)

- Multiple repetitive cycle (facing - G72)
- Multiple repetitive cycle (finishing - G70)
- Multiple repetitive cycle (roughing - G71)
- Multiple thread cutting (G33)
- Multiple thread cutting cycle (G76)
- Reference position return (G28, G30, G53)
- Rigid tapping cycle (G84, G88)
- Spindle indexing (G64)
- Spindle orientation (M19)
- Stored stroke check
- Thread cutting cycle (G78)
- Thread cutting retract
- Tool life management
- Tool nose radius compensation (G40, G41, G42)
- Tool offset pairs - 32 pairs
- Workpiece coordinate system (G53 - G59)
- Workpiece coordinate system preset (G92, G92.1)

Display

- 10.4" color LCD monitor
- 6 Languages Display (English, French, German, Italian, Portuguese, Spanish)
- Alarm history display
- Animation screen for conversational programming
- Application software - PMC - display
- Application software variables display
- Axes positioning
- Clock
- Diagnostic screen
- Feedrate display
- Graphic display
- Help screen
- Load meter with bar graph
- Maintenance history display
- Modal G codes
- Operator alarms
- Parts counter
- Program directory

- Programmed codes display (T, S, M, F)
- Run hour display
- Spindle speed

Tests

- Self diagnosis
- Dry run
- Program test without move the machine axes

Interfaces

- Built in application software
- PCMCIA interface (additional memory for storing data)
- Serial RS232C interface with programmable speed
- Complete alphanumeric keyboard (MDI)
- Electronic handwheel
- Integrated operation panel

Customized Romi software - Standard

- Data display
- Part program storage (64 kBytes / 160 m)
- Tool load monitor
- Main spindle indexing
- Manual tool preset (B)
- Semi-automatic tool preset (B)
- Conversational programming "Manual Guide"
- Jaw machining system
- Automatic tool wear compensation (B)
- Conditional jump (M80)

Customized Romi software - Optional

- Remote diagnosis (C)

- (A) According to the machine model
(B) Requires the accessory "tool setter"
(C) Machine should be prepared with the optional "remote diagnostic interface"

G Series

Technical Features

Tool holders and reduction sleeves

	G 30			G 30M			G 50			G 50M		
	Section	Code	Qty(*)	Section	Code	Qty(*)	Section	Code	Qty(*)	Section	Code	Qty(*)
Bi-directional turning tool holder	mm	25 x 25	R80030	7	-	-	-	32 x 32	S26739	6	-	-
Turning tool holder - left tool	mm	-	-	-	25 x 25 (VDI-40)	R99187	5	32 x 32	S26743	1	32 x 32 (VDI-50)	S05586
Turning tool holder - right tool	mm	-	-	-	25 x 25 (VDI-40)	S39389	2	32 x 32	S26744	0	32 x 32 (VDI-50)	S22380
Boring bar holder	mm	Ø 50	R80032	4	Ø 40 (VDI-40)	R99498	4	-	-	-	Ø 50 (VDI-50)	S05590
Boring bar holder (short)	mm	-	-	-	-	-	-	Ø 50	S30512	3	-	-
Boring bar holder (long)	mm	-	-	-	-	-	-	Ø 50	S30513	1	-	-
Reduction sleeve	mm	Ø 12	R85919	1	Ø 10	S51738	1	Ø 12	S30423	1	Ø 12	S51754
Reduction sleeve	mm	Ø 16	R85920	1	Ø 12	S51739	1	Ø 16	S30424	1	Ø 16	S51755
Reduction sleeve	mm	Ø 20	R85921	1	Ø 16	S51740	1	Ø 20	S30425	1	Ø 20	S51756
Reduction sleeve	mm	Ø 25	R85922	1	Ø 20	S51741	1	Ø 25	S30426	1	Ø 25	S51757
Reduction sleeve	mm	Ø 32	R85923	2	Ø 25	S51742	2	Ø 32	S30427	2	Ø 32	S51758
Reduction sleeve	mm	Ø 40	R85924	1	Ø 32	S51743	1	Ø 40	S30428	1	Ø 40	S51759
Drill socket	MT	2	R85992	0	-	-	-	2	S30903	0	-	-
Drill socket	MT	3	R85995	0	-	-	-	3	S30904	0	-	-
Drill socket	MT	4	R85996	0	-	-	-	4	S30905	0	-	-
Facing tool holder	mm	25 x 25	R80035	1	25 x 25 (VDI-40)	R99491	1	32 x 32	S26740	1	32 x 32 (VDI-50)	S05588
T-MAX type boring bar holder	mm	Ø 50	R80037	0	-	-	-	Ø 50	S30861	0	-	-
T-MAX type drill socket	mm	Ø 20	R89218	0	-	-	-	Ø 20	S33720	0	-	-
T-MAX type drill socket	mm	Ø 25	R89219	0	-	-	-	Ø 25	S33721	0	-	-
T-MAX type drill socket	mm	Ø 32	R89220	0	-	-	-	Ø 32	S33722	0	-	-
T-MAX type drill socket	mm	Ø 40	R89221	0	-	-	-	Ø 40	S33723	0	-	-
Bi-directional turning tool holder	in	1 x 1	R80031	-	-	-	-	1 1/4 x 1 1/4	S32759	6	-	-
Turning tool holder - left tool	in	-	-	-	-	-	-	1 1/4 x 1 1/4	S32776	1	-	-
Turning tool holder - right tool	in	-	-	-	-	-	-	1 1/4 x 1 1/4	S32777	0	-	-
Boring bar holder	in	2	R80034	-	-	-	-	-	-	-	-	-
Boring bar holder (short)	in	-	-	-	-	-	-	2	S32760	3	-	-
Boring bar holder (long)	in	-	-	-	-	-	-	2	S32775	1	-	-
Reduction sleeve	in	1/2	R85918	-	-	-	-	1/2	S32761	1	-	-
Reduction sleeve	in	5/8	R85925	-	-	-	-	5/8	S32762	1	-	-
Reduction sleeve	in	3/4	R85926	-	-	-	-	3/4	S32763	1	-	-
Reduction sleeve	in	1	R85927	-	-	-	-	1	S32764	1	-	-
Reduction sleeve	in	1 1/4	R85928	-	-	-	-	1 1/4	S32765	2	-	-
Reduction sleeve	in	1 1/2	R85929	-	-	-	-	1 1/2	S32766	1	-	-
Drill socket	MT	2	R85997	-	-	-	-	2	S32767	0	-	-
Drill socket	MT	3	R85998	-	-	-	-	3	S32768	0	-	-
Drill socket	MT	4	R85901	-	-	-	-	4	S32769	0	-	-
Facing tool holder	in	1 x 1	R80036	-	-	-	-	1 1/4 x 1 1/4	S32770	1	-	-
T-MAX type boring bar holder	in	2	R80038	-	-	-	-	2	S32771	0	-	-
T-MAX type drill socket	in	3/4	R89214	-	-	-	-	3/4	S33714	0	-	-
T-MAX type drill socket	in	1	R89215	-	-	-	-	1	S32772	0	-	-
T-MAX type drill socket	in	1 1/4	R89216	-	-	-	-	1 1/4	S32773	0	-	-
T-MAX type drill socket	in	1 1/2	R89217	-	-	-	-	1 1/2	S32774	0	-	-
Axial driven tool holder	DIN	-	-	-	ER-32	S40943	-	-	-	-	ER-40	S48103
Radial driven tool holder	DIN	-	-	-	ER-32	S40944	-	-	-	-	ER-40	S48115
Collet kit	DIN	-	-	-	ER-32 (Ø3 to Ø20)	R71153	-	-	-	-	ER-40 (Ø4 to Ø26)	R65569
collet	mm	-	-	-	Ø 3	R71013	-	-	-	-	Ø 4	R71078
collet	mm	-	-	-	Ø 4	R71012	-	-	-	-	Ø 5	R71079
collet	mm	-	-	-	Ø 5	R71011	-	-	-	-	Ø 6	R71080
collet	mm	-	-	-	Ø 6	R71010	-	-	-	-	Ø 7	R71081
collet	mm	-	-	-	Ø 7	R71009	-	-	-	-	Ø 8	R71082
collet	mm	-	-	-	Ø 8	R71008	-	-	-	-	Ø 9	R71083
collet	mm	-	-	-	Ø 9	R71007	-	-	-	-	Ø 10	R71084
collet	mm	-	-	-	Ø 10	R71006	-	-	-	-	Ø 11	R71085
collet	mm	-	-	-	Ø 11	R71005	-	-	-	-	Ø 12	R71086
collet	mm	-	-	-	Ø 12	R71004	-	-	-	-	Ø 13	R71087
collet	mm	-	-	-	Ø 13	R71003	-	-	-	-	Ø 14	R71088
collet	mm	-	-	-	Ø 14	R71002	-	-	-	-	Ø 15	R71089
collet	mm	-	-	-	Ø 15	R71001	-	-	-	-	Ø 16	R71090
collet	mm	-	-	-	Ø 16	R71000	-	-	-	-	Ø 17	R71091
collet	mm	-	-	-	Ø 17	R70999	-	-	-	-	Ø 18	R71092
collet	mm	-	-	-	Ø 18	R70998	-	-	-	-	Ø 19	R71093
collet	mm	-	-	-	Ø 19	R70997	-	-	-	-	Ø 20	R71094
collet	mm	-	-	-	Ø 20	R70996	-	-	-	-	Ø 21	R71095
collet	mm	-	-	-	-	-	-	-	-	-	Ø 22	R71096
collet	mm	-	-	-	-	-	-	-	-	-	Ø 23	R71097
collet	mm	-	-	-	-	-	-	-	-	-	Ø 24	R71098
collet	mm	-	-	-	-	-	-	-	-	-	Ø 25	R71099
collet	mm	-	-	-	-	-	-	-	-	-	Ø 26	R71100

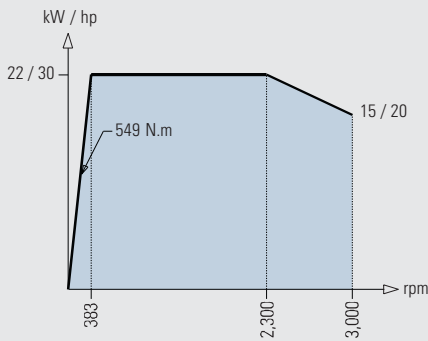
(*) Quantity supplied with the machine



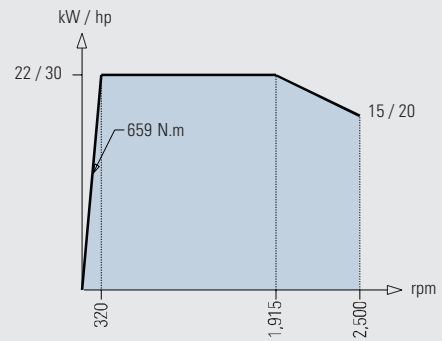
Spindle output

G 30

ASA A2-8" spindle nose (standard)
 Ø 254 mm / 10" chuck

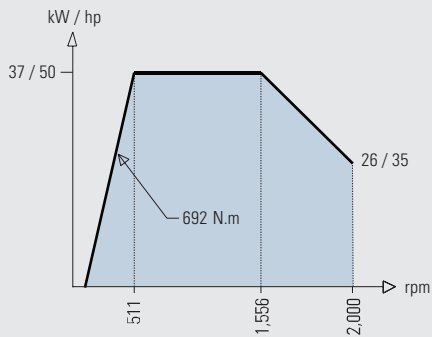


ASA A2-8" spindle nose (high torque)
 Ø 315 mm / 12.4" chuck

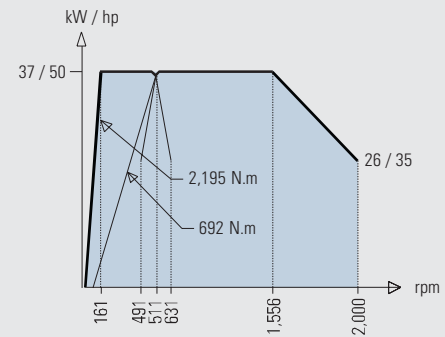


G 50

ASA A2-8" spindle nose (standard)
 Ø 315 mm / 12.4" chuck



ASA A2-11" spindle nose (high torque)
 with reduction gearbox
 Ø 400 mm / 15.7" chuck



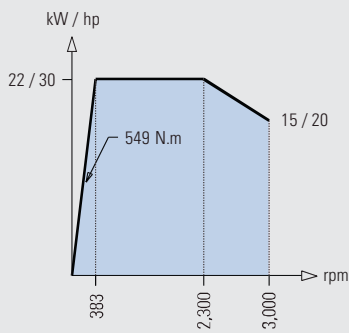
G Series

Technical Features

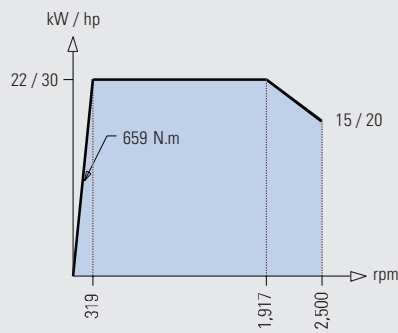
Spindle output

G 30M

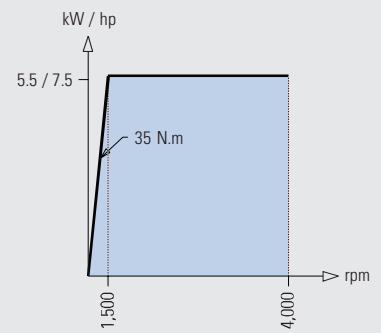
ASA A2-8" spindle nose (standard)
 Ø 254 mm / 10" chuck



ASA A2-8" spindle nose (high torque)
 Ø 315 mm / 12.4" chuck

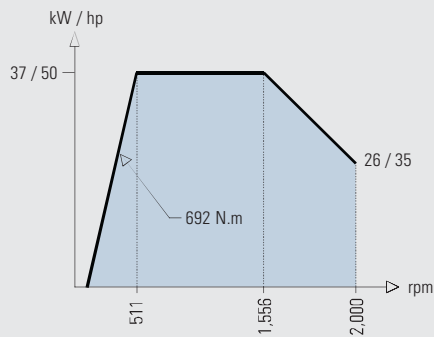


Driven tools

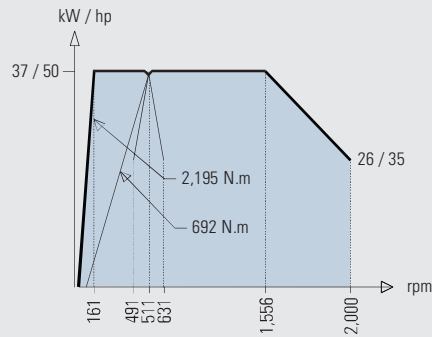


G 50M

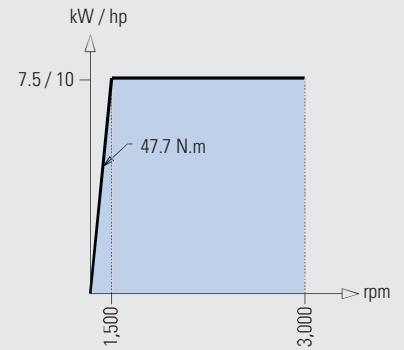
ASA A2-8" spindle nose (standard)
 Ø 315 mm / 12.4" chuck



ASA A2-11" spindle nose (high torque)
 with reduction gearbox
 Ø 400 mm / 15.7" chuck



Driven tools

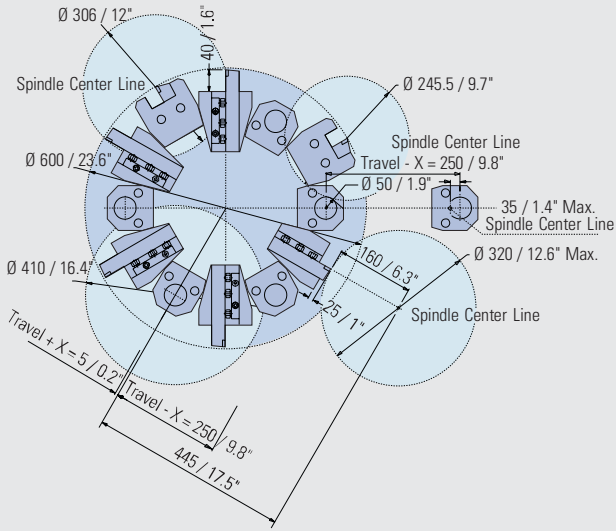




Turret diagram - Dimensions in mm/inches. The drawings aren't in scale.

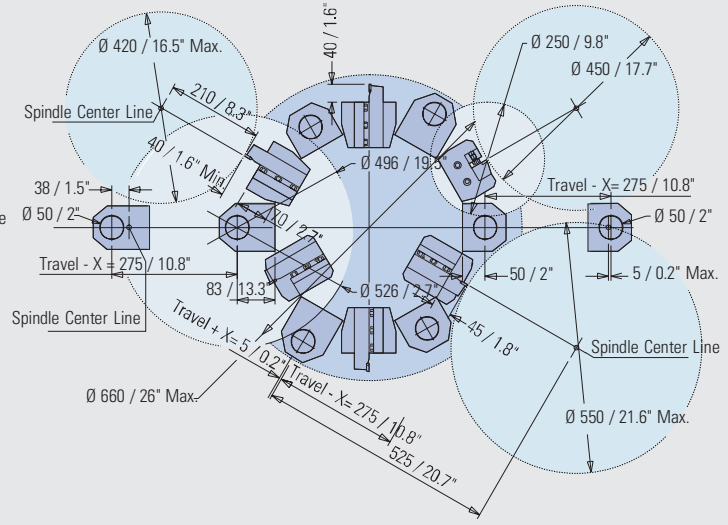
G 30

Romi Turret



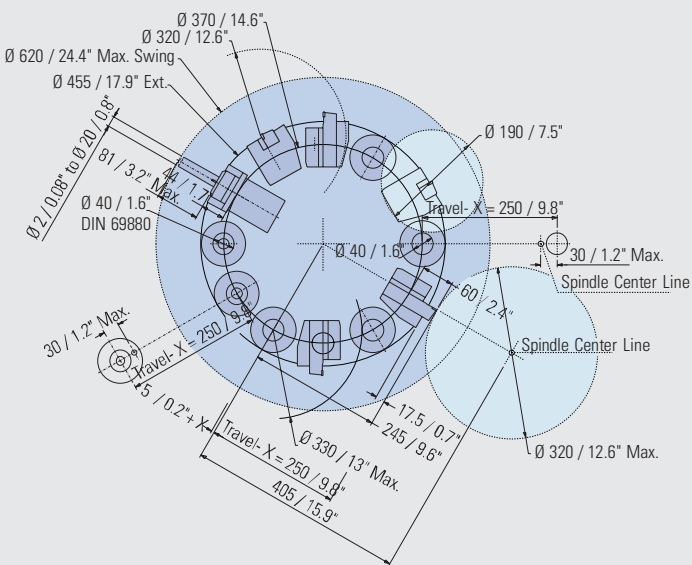
G 50

Romi Turret



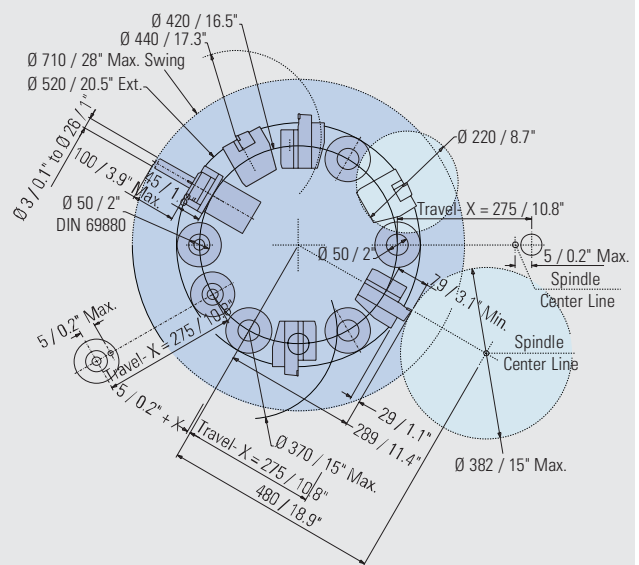
G 30M

VDI-40 Turret



G 50M

VDI-50 Turret



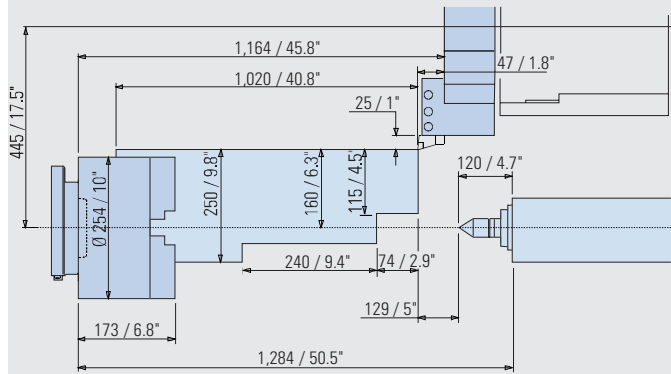
G Series

Technical Features

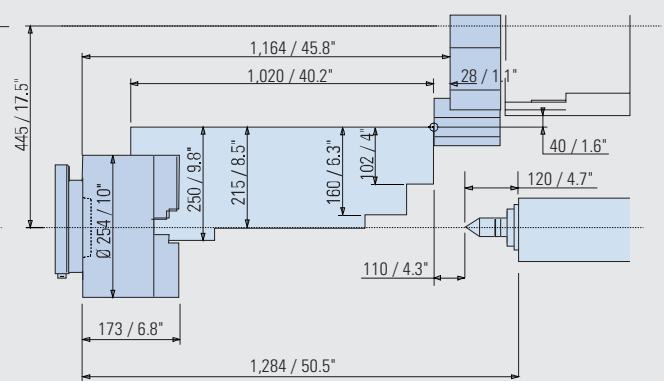
Work area layout - Dimensions in mm/inches. The drawings aren't in scale.

G 30

External tool

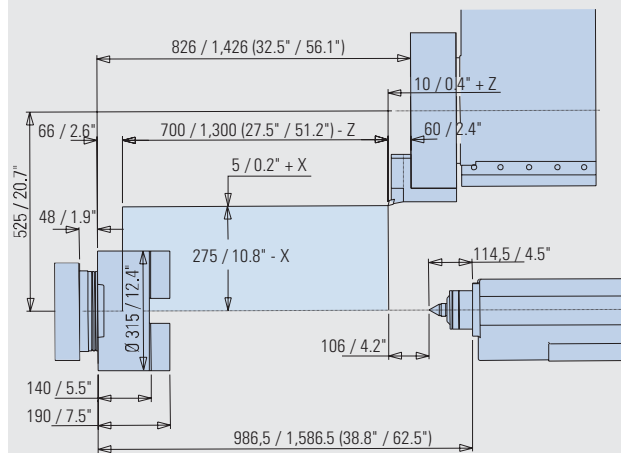


Internal tool

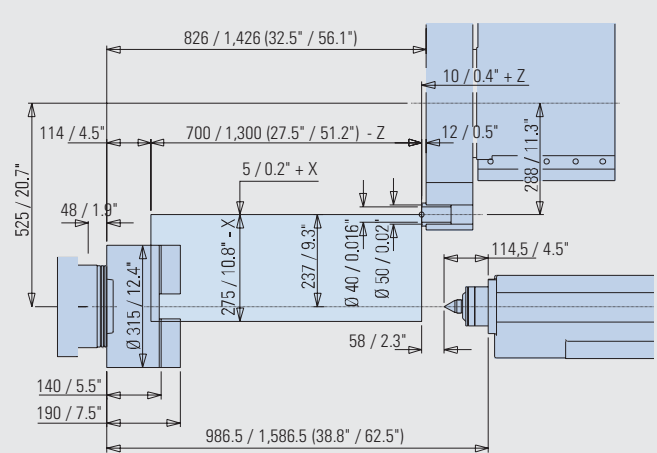


G 50

External tool



Internal tool





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