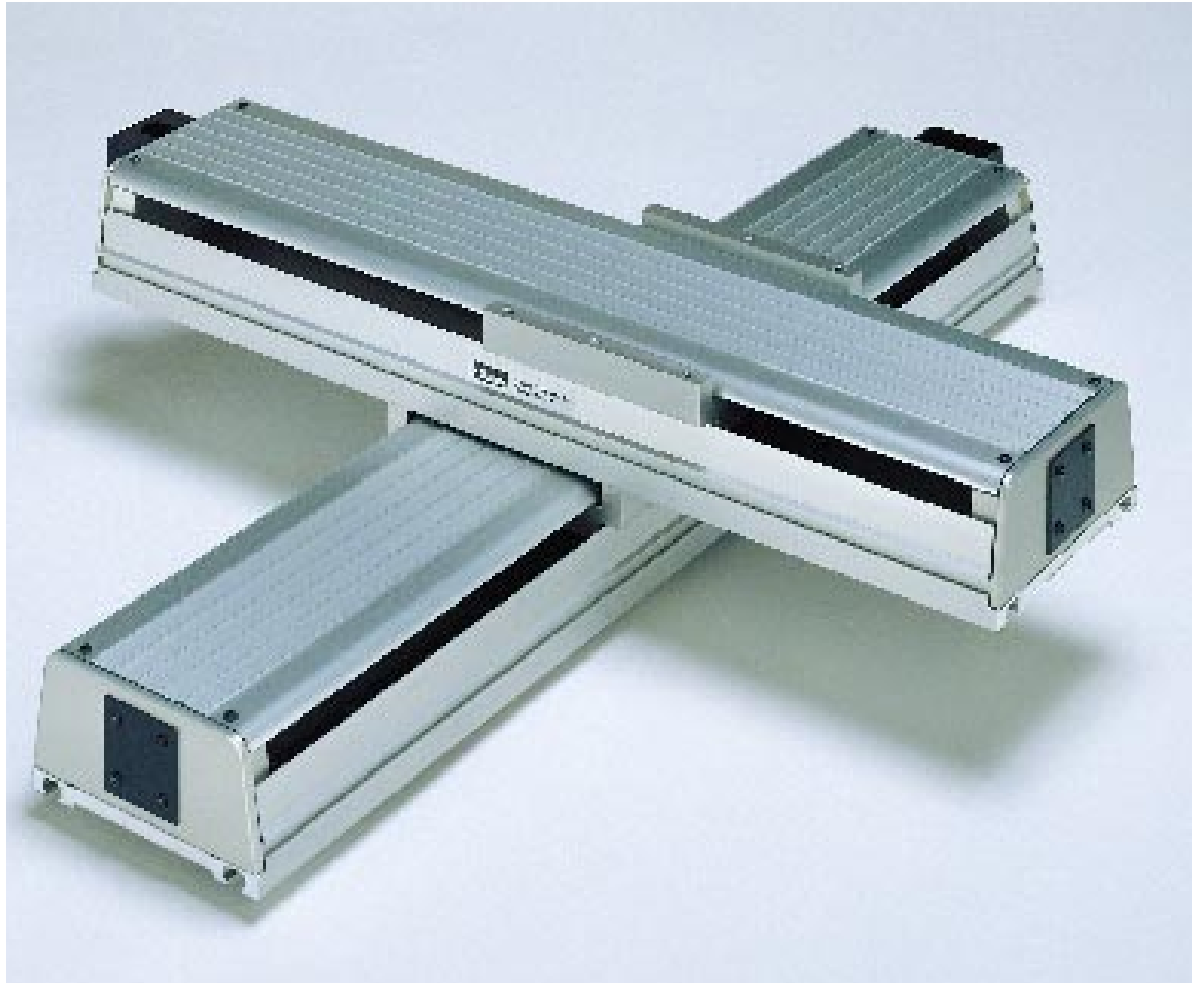


Daedal

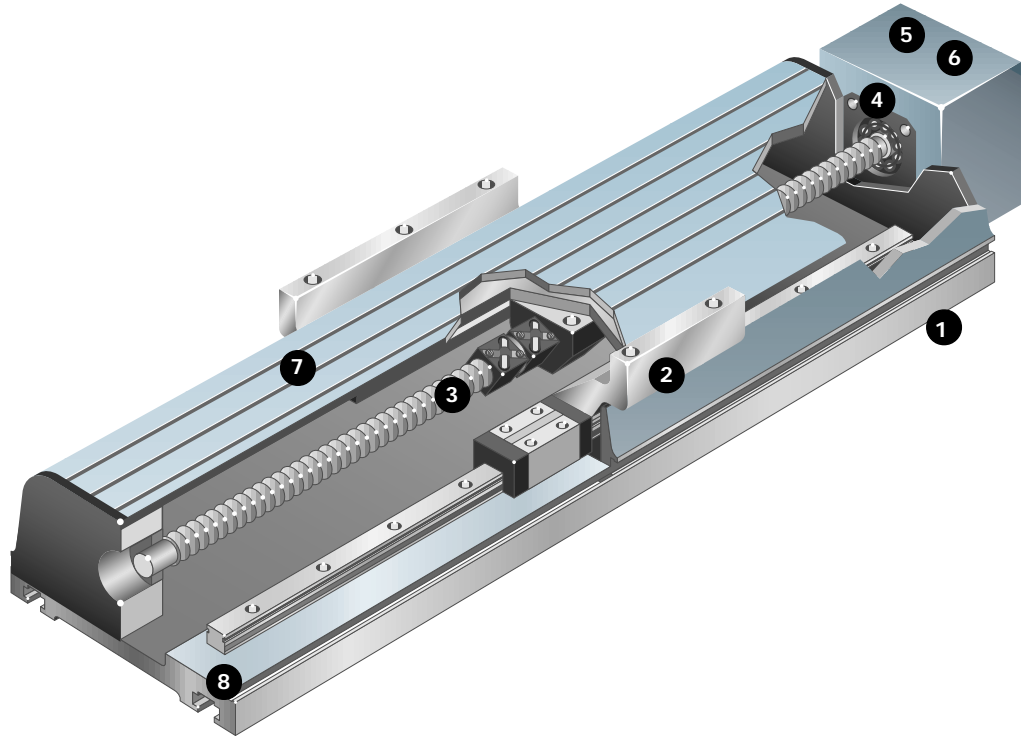
*406000ET Series
Linear Positioning
Tables*

Catalog 000-9137-01



406000ET Series

The 406000ET represents a substantial improvement in complete package linear motion tables. Modeled after Daedals 506000ET table the 406000ET retains all of the 506000ET features which have made it so popular, while increasing load capacity and stiffness by a factor of 3, through the use of square rail linear bearings. The 406000ET is a global product with all metric hardware and user friendly "T" slot mounting.



406000ET

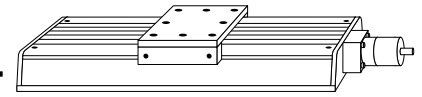
	406004ET	406006ET	406008ET	406010ET	406012ET	406014ET	406016ET	406018ET
Travel – inches (mm)	4 (100)	6 (150)	8 (200)	10 (250)	12 (300)	14 (350)	16 (400)	18 (450)
Life @ Listed Specifications – x 1 million in (km)	100 (2540)	100 (2540)	100 (2540)	100 (2540)	100 (2540)	100 (2540)	100 (2540)	100 (2540)
Positional Accuracy* – x 0.001 in (µm)	1.0 (25)	1.5 (38)	2.0 (51)	2.5 (64)	3.0 (76)	3.5 (89)	4.0 (102)	4.5 (114)
Positional Repeatability – x 0.001 in (µm)	±0.2 (±5)	±0.2 (±5)	±0.2 (±5)	±0.2 (±5)	±0.2 (±5)	±0.2 (±5)	±0.2 (±5)	±0.2 (±5)
Straight Line Accuracy* – x 0.001 in (µm)	0.8 (20)	1.2 (30)	1.5 (38)	1.5 (38)	1.5 (38)	1.9 (48)	2.3 (58)	2.7 (69)
Flatness Accuracy* – x 0.001 in (µm)	0.8 (20)	1.2 (30)	1.5 (38)	1.5 (38)	1.5 (38)	1.9 (48)	2.3 (58)	2.7 (69)
Max Screw Speed – rps	50	50	50	50	50	50	50	50
Max Acceleration – in/sec ² (m/sec ²)	772 (20)	772 (20)	772 (20)	772 (20)	772 (20)	772 (20)	772 (20)	772 (20)
Duty Cycle – % of motion to dwell cycle	100%	100%	100%	100%	100%	100%	100%	100%
Direct Loading – lbs (Kg) Normal/Inverted	600 (275)	600 (275)	600 (275)	600 (275)	600 (275)	600 (275)	600 (275)	600 (275)
Axial Loading – lbs (kgf) Smooth Operation**	160 (73)	160 (73)	160 (73)	160 (73)	160 (73)	160 (73)	160 (73)	160 (73)
Input Inertia*** – 10 ⁻³ oz-in-sec ² (10 ⁻⁶ kg-m-sec ²)	2.40 (1,73)	2.77 (1,99)	3.13 (2,25)	3.49 (2,52)	3.86 (2,77)	4.22 (3,04)	4.31 (3,11)	4.95 (3,56)
Maximum Running Torque – oz-in (N-m)	24 (0,17)	24 (0,17)	24 (0,17)	24 (0,17)	24 (0,17)	24 (0,17)	24 (0,17)	24 (0,17)
Maximum Breakaway Torque – oz-in (N-m)	26 (0,19)	26 (0,19)	26 (0,19)	26 (0,19)	26 (0,19)	26 (0,19)	26 (0,19)	26 (0,19)
Drive Screw Efficiency – %	75	75	75	75	75	75	75	75
Coefficient of Linear Bearing Friction	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Carriage Weight – lbs (kgf)	4.5 (2,0)	4.5 (2,0)	4.5 (2,0)	4.5 (2,0)	4.5 (2,0)	4.5 (2,0)	4.5 (2,0)	4.5 (2,0)
Longitudinal Span between Bearing Truck Centers (d1) – in (mm)	3.0 (76)	3.0 (76)	3.0 (76)	3.0 (76)	3.0 (76)	3.0 (76)	3.0 (76)	3.0 (76)
Lateral Span between Bearing Rail Centers (d2) – in (mm)	3.9 (99,1)	3.9 (99,1)	3.9 (99,1)	3.9 (99,1)	3.9 (99,1)	3.9 (99,1)	3.9 (99,1)	3.9 (99,1)
Bearing Rail Center to Carriage Mounting Surface (da) – in (mm)	2.08 (52,8)	2.08 (52,8)	2.08 (52,8)	2.08 (52,8)	2.08 (52,8)	2.08 (52,8)	2.08 (52,8)	2.08 (52,8)
Table Weight - lbs (kgf)	19 (8,7)	20 (9,1)	21 (9,5)	22 (10)	23 (10,5)	24 (11)	25 (11,4)	26 (11,8)

* Over total table travel

** For applications with vibration, consult factory for axial loads.

*** Based on 5 pitch (0.2 inch lead) ballscrew

Enclosed Rail Tables



1 High Strength Extruded Base

The foundation of the 406000ET is a high strength ribbed aluminum base protected by a clear anodized finish. To insure straight, flat motion the bearing and mounting surfaces are machined flat.

2 Square Rail Linear Bearings

To provide the strength and stiffness required in today's industrial applications these tables are equipped with precision, high stiffness, square rail linear bearings which provide years of smooth dependable motion.

3 High Efficiency Ball Screw Drive

To provide the thrust your application requires, the 406000ET is equipped with either 0.2 inch or 0.5 inch lead ball screws. These high efficiency rolled ball screws incorporate a double nut design which reduces backlash to less than 5 microns. For applications requiring very smooth motion the 406000ET tables can be provided with a ground ball screw in models up to 600mm of travel.

4 High Stiffness Screw Bearings

To take full advantage of the ball screw design, the 406000ET is equipped with precision angular contact bearings enabling continuous thrust loads to 70 Kg at 2540 Km of life.

5 Couplers

To meet your application needs a selection of couplers are offered: Oldham style for stepper motor applications or Bellows style for servo motor applications. Both styles are available with bores to match common motor shaft sizes.

6 Motor Mounts

The 406000ET can be ordered with either NEMA 23 or 34 motor mounts or custom motor mounts can be supplied to meet your needs.

7 Protective, Attractive Covers

The table design includes side and top extruded plates providing a hard shell cover which protects the bearings and drive screw while providing an attractive "finished" appearance.

8 Base and Side "T" Slots

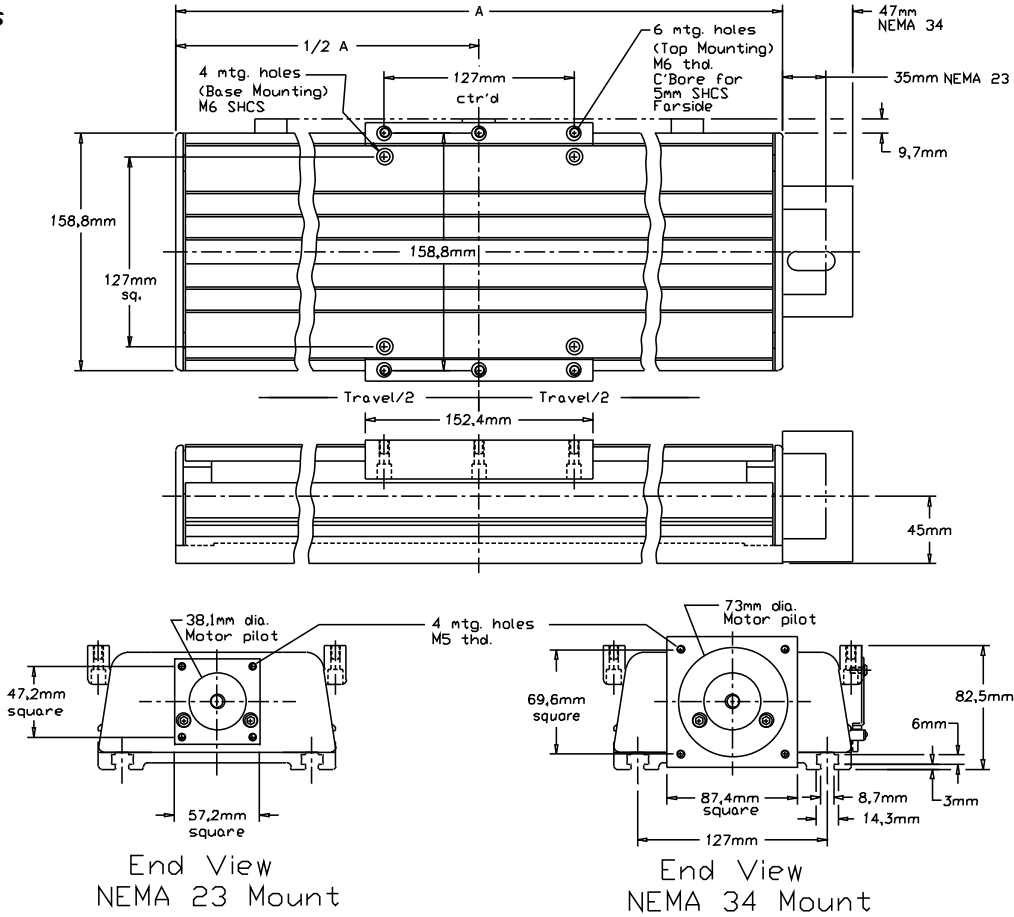
Base "T" slots provide universal mounting of the table. The side "T" slots provide convenient mounting of limit and home sensors.

406000ET

406020ET	406022ET	406024ET	406030ET	406036ET	406042ET	406048ET	406054ET	406060ET
20 (500)	22 (550)	24 (600)	30 (750)	36 (900)	42 (1050)	48 (1200)	54 (1350)	60 (1500)
100 (2540)	100 (2540)	100 (2540)	100 (2540)	100 (2540)	100 (2540)	100 (2540)	100 (2540)	100 (2540)
5.0 (127)	5.5 (140)	6.0 (152)	7.5 (190)	9.0 (229)	10.5 (267)	12 (305)	13.5 (343)	15 (381)
±0.2 (±5)	±0.2 (±5)	±0.2 (±5)	±0.2 (±5)	±0.2 (±5)	±0.2 (±5)	±0.2 (±5)	±0.2 (±5)	±0.2 (±5)
3.0 (76)	3.0 (76)	3.0 (76)	4.2 (107)	4.5 (114)	5.7 (145)	6.0 (152)	7.2 (183)	7.5 (191)
3.0 (76)	3.0 (76)	3.0 (76)	4.2 (107)	4.5 (114)	5.7 (145)	6.0 (152)	7.2 (183)	7.5 (191)
45	39	34	23	16	18	14	12	10
772 (20)	772 (20)	772 (20)	772 (20)	772 (20)	772 (20)	772 (20)	772 (20)	772 (20)
100%	100%	100%	100%	100%	100%	100%	100%	100%
600 (275)	600 (275)	600 (275)	600 (275)	600 (275)	600 (275)	600 (275)	600 (275)	600 (275)
160 (73)	160 (73)	160 (73)	160 (73)	160 (73)	160 (73)	160 (73)	160 (73)	160 (73)
5.31 (3,82)	5.67 (4,09)	6.04 (4,34)	7.13 (5,15)	8.22 (5,91)	18.69 (13,4)	20.89 (15,0)	23.07 (16,6)	25.27 (18,2)
24 (0,17)	24 (0,17)	24 (0,17)	24 (0,17)	24 (0,17)	24 (0,17)	24 (0,17)	24 (0,17)	24 (0,17)
26 (0,19)	26 (0,19)	26 (0,19)	26 (0,19)	26 (0,19)	26 (0,19)	26 (0,19)	26 (0,19)	26 (0,19)
75	75	75	75	75	75	75	75	75
0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
4.5 (2,0)	4.5 (2,0)	4.5 (2,0)	4.5 (2,0)	4.5 (2,0)	4.5 (2,0)	4.5 (2,0)	4.5 (2,0)	4.5 (2,0)
3.0 (76)	3.0 (76)	3.0 (76)	3.0 (76)	3.0 (76)	3.0 (76)	3.0 (76)	3.0 (76)	3.0 (76)
3.9 (99,1)	3.9 (99,1)	3.9 (99,1)	3.9 (99,1)	3.9 (99,1)	3.9 (99,1)	3.9 (99,1)	3.9 (99,1)	3.9 (99,1)
2.08 (52,8)	2.08 (52,8)	2.08 (52,8)	2.08 (52,8)	2.08 (52,8)	2.08 (52,8)	2.08 (52,8)	2.08 (52,8)	2.08 (52,8)
27 (12,3)	29 (13,2)	30 (13,6)	35 (16)	39 (18)	45 (20,5)	50 (22,7)	56 (25,5)	60 (27)

406000ET Series

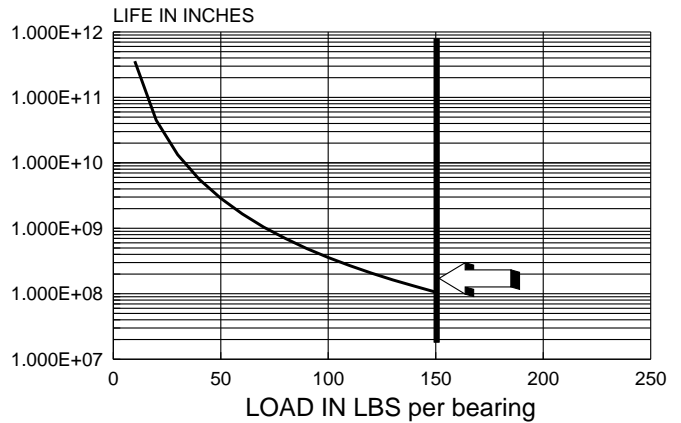
Dimensions



Model Number	Travel with D1 and D2		Travel with D3		A	
	in	mm	in	mm	in	mm
406004ET	4	(100)	2	(50)	12	(305)
406006ET	6	(150)	4	(100)	14	(356)
406008ET	8	(200)	6	(150)	16	(406)
406010ET	10	(250)	8	(200)	18	(457)
406012ET	12	(300)	10	(250)	20	(508)
406014ET	14	(350)	12	(300)	22	(559)
406016ET	16	(400)	14	(350)	24	(610)
406018ET	18	(450)	16	(400)	26	(660)
406020ET	20	(500)	18	(450)	28	(711)
406022ET	22	(550)	20	(500)	30	(762)
406024ET	24	(600)	22	(550)	32	(813)
406030ET	30	(750)	28	(700)	38	(965)
406036ET	36	(900)	34	(850)	44	(1118)
406042ET	42	(1050)	40	(1000)	50	(1270)
406048ET	48	(1200)	46	(1150)	56	(1422)
406054ET	54	(1350)	52	(1300)	62	(1575)
406060ET	60	(1500)	58	(1450)	68	(1727)

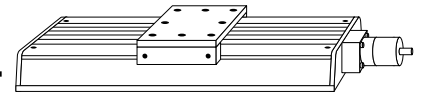
Life/Load Performance

Life for Compression, Tension or Side Load*



* Refer to Daedal Manual & Motorized Positioning Systems Catalog 000-9132-01, page B7-B15 for complete load/life calculation formulas and specifications.

Enclosed Rail Tables



Order Example

How to Order

<input checked="" type="checkbox"/> Model Series	4	4	06	022	ET	-	M	S	-	D2	L2	C2	M2	W1
<input checked="" type="checkbox"/> Table Width														
6 in 150 mm	06													
<input checked="" type="checkbox"/> Table Travel*														
4 in 100 mm 004				022										
6 in 150 mm 006				024										
8 in 200 mm 008				030										
10 in 250 mm 010				036										
12 in 300 mm 012				042										
14 in 350 mm 014				048										
16 in 400 mm 016				054										
18 in 450 mm 018				060										
20 in 500mm 020														
<input checked="" type="checkbox"/> Table Style	ET													
<input checked="" type="checkbox"/> Mounting														
Metric	M													
<input checked="" type="checkbox"/> Grade														
Standard Grade	S													
<input checked="" type="checkbox"/> Drive Type ⁽¹⁾														
Free Travel	D1													
0.20 in Lead (5 Pitch) Rolled Ballscrew	D2													
0.50 in Lead (2 Pitch) Rolled Ballscrew	D3													
<input checked="" type="checkbox"/> Limit/Home														
No Limit/Home Switches	L1													
Hall Effect Limit/Home Sensors-Outboard	L2													
<input checked="" type="checkbox"/> Motor Coupling														
No Coupling	C1													
0.25 in Bore, Oldham	C2													
0.25 in Bore, Bellows	C3													
0.375 in Bore, Oldham	C4													
0.375 in Bore, Bellows	C5													
<input checked="" type="checkbox"/> Motor Mount														
No Motor Mount	M1													
23 Frame Size	M2													
34 Frame Size	M3													
<input checked="" type="checkbox"/> Way Covers														
Hard Shell Cover	W1													

* Maximum travels are based on D2 drive screw selection. Travels may be less when selecting other drive screws. Refer to drawing charts for actual table travel.

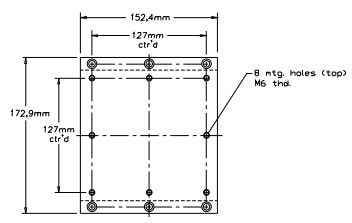
406000ET

⁽¹⁾ Ground Ball screws available to 600mm travel, contact Daedal for details.

Accessories

T-Nuts	
Thread	Order Number
M5	003-1990-01
M6	003-1990-02
1/4-20	003-1990-05

Optional Top Mounting Plate
Order Number 100-1209-01



Optional Top Mounting Plate

We have the people and the products to solve your application needs.

At Daedal, Hauser, Automation Actuator, Compumotor and Digiplan, we understand the demands of the positioning systems marketplace. Throughout Europe, the Pacific Rim and North America, our products are delivered and supported through a comprehensive network of factory-trained Automation Technology Center engineers. In addition to the services offered by traditional distributors, these organizations specialize in the application of high technology automation equipment. They offer local product availability, product demonstrations, complementary products and services, programming assistance and in-depth customer seminars.

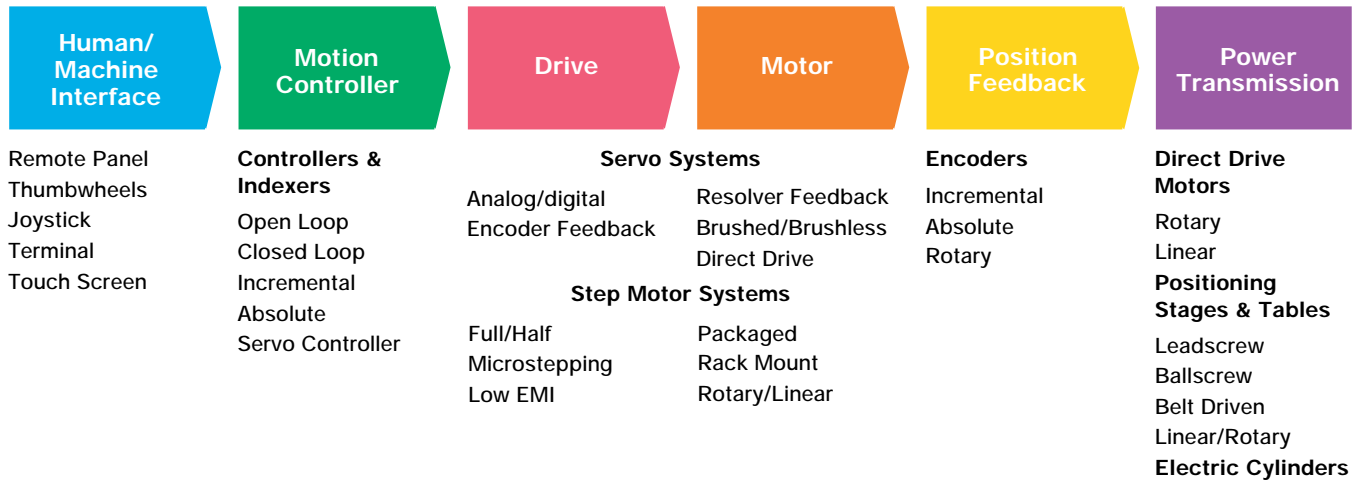
Every company promises service, but Daedal, Hauser, Automation Actuator, Compumotor and Digiplan have the people to assure timely, expert support. For example, our North American ATC Network has more than 150 factory-trained engineers. These field application engineers are ready and prepared to offer assistance in product selection, installation and product/system programming.

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 Rohnert Park, CA 94928 USA
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 FAX: 707/584-8015

Digiplan Division
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Automation Actuator Division
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