HELICAL GEAR

Stack Mould Centering Devices

Easy to design, install, adjust and maintain

- Significantly simplifies stack mold design and maintenance
- Mold open stroke can easily be adjusted in the press
- Standard tools and accessories simplify installation

Robust, proven, and fail-safe design

- Decades of real-world experience with the basic design and components
- High-quality components provide unrelenting service for the life of your mold
- Helical gear nuts include a nylon insert, designed as a fail-safe to protect your mold investment

HELICAL GEAR
HELICAL GEAR STACK MOULD SYSTEMS

HG

DME has decades of design and engineering expertise to assist you in design and development of stack moulds.

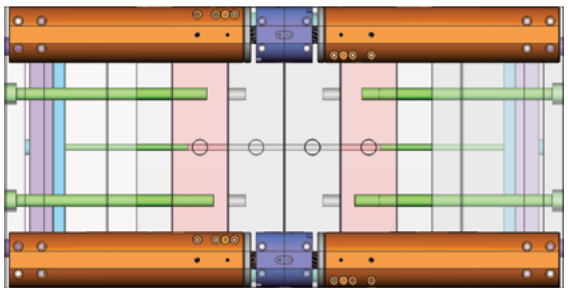
Our Helical Gears are the industry standard with decades of proven applications in a wide variety of applications and plastic resins. Our Helical Gear housings and assemblies greatly simplify the design and development of stack moulds, leaving you more time to concentrate on the core and cavity details. Off-the-shelf components are available when you need them. DME quality ensures reliability and interchangeability of all components.

DME engineers and designers are available to assist you with your questions whether you are building your first stack mould or challenging multilevel stack moulds with complex mould actions.
DME even offers complete design services (up to the cores and cavities) for those needing to off-load design and engineering during peak workloads.

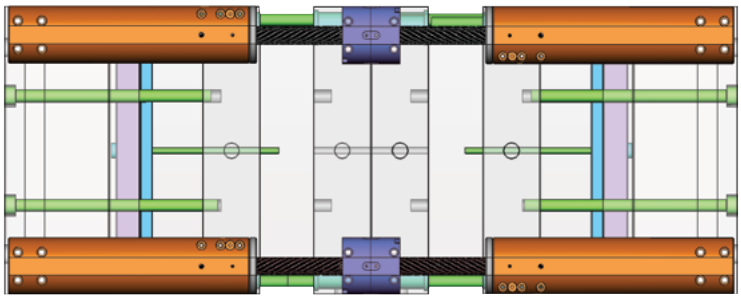
With DME, you can order individual components, complete assemblies ready for installation, or complete systems including design and engineering.

DME Helical Gear housings and assemblies greatly simplify the design and development of stack moulds - leaving you more time to concentrate on core and cavity details.

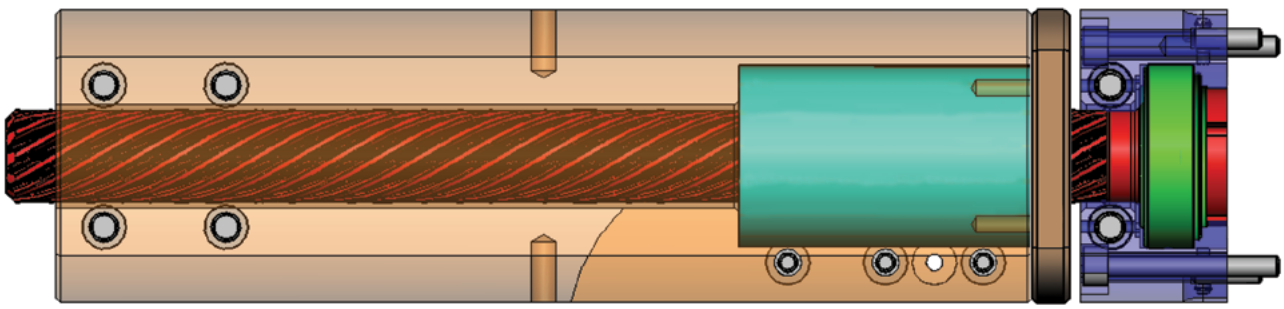
Mould closed



Mould open



HELICAL GEAR STACK MOULD CENTERING DEVICES ENSURE THAT BOTH PARTING LINES OPEN THE SAME DISTANCE SIMULTANEOUSLY.



CAD reference point

HELICAL GEAR
HELICAL GEAR STACK MOULD SYSTEMS

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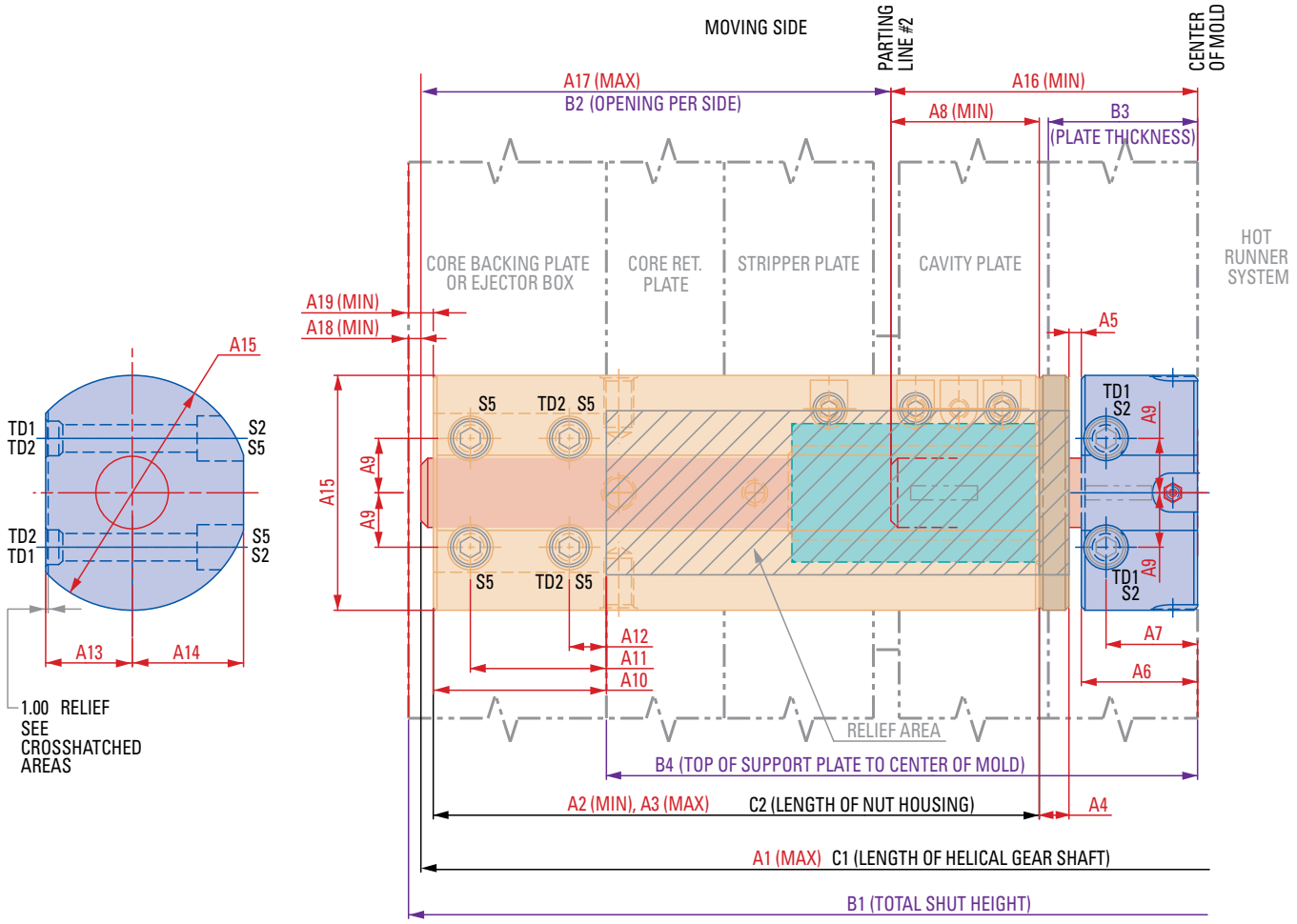

Mounting Screws and Dowels		
	HG28	**HG38**
S2 Socket Head Cap Screw	M10 x 75mm	M12 x 110mm
S5 Socket Head Cap Screw	M10 x 75mm	M12 x 110mm
TD1 Tubular Dowel	Ø14mm x 10mm	Ø18mm x 12mm
TD2 Tubular Dowel	Ø14mm x 10mm	Ø18mm x 12mm

CAD reference point

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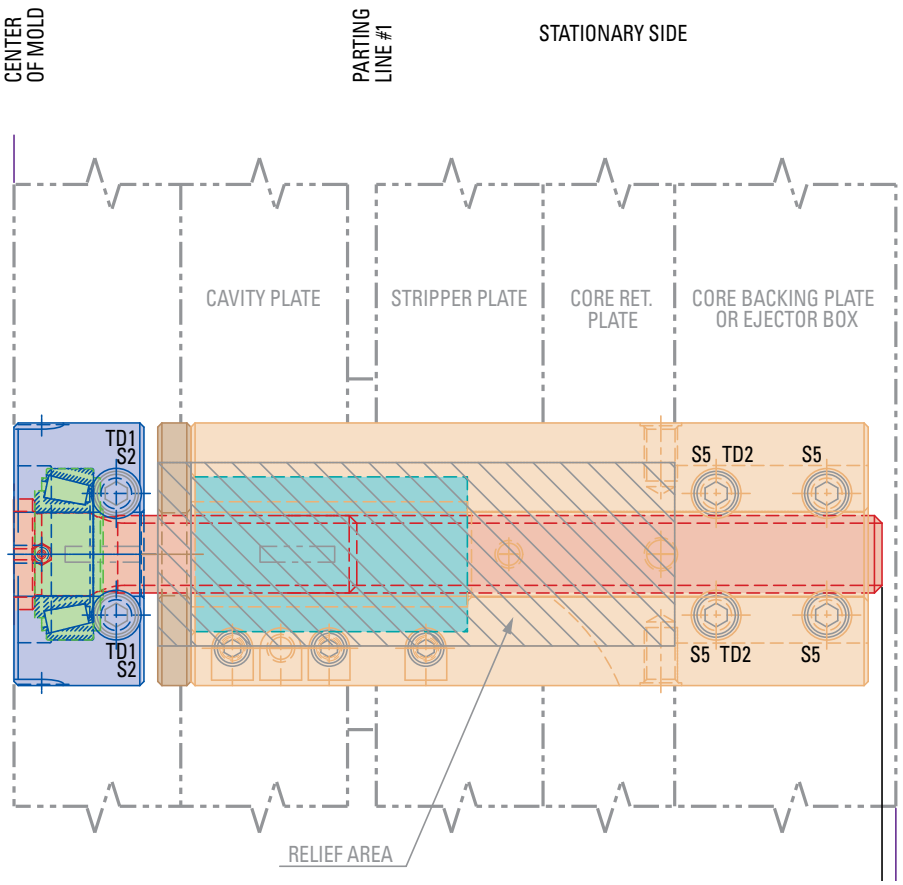


Constant Dimensions

	HG28-1000	HG38-1200	HG38-1500
A1	1000	1200	1500
A2	245	296	296
A3	436	520	670
A4	12	15	15
A5	5	5	5
A6	47	60	60
A7	37	48	48
A8	60	75	75
A9	22	29	29
A10	70	90	90

	HG28-1000	HG38-1200	HG38-1500
A11	55	70	70
A12	15	20	20
A13	35	45	45
A14	45	57	57
A15	95	120	120
A16	124	155	155
A17	376	445	595
A18	5	5	5
A19	5	5	5

Input Data

	HG28	HG38
B1		
B2		
B3		
B4		

Restrictions

IF: B4 ≥ 1/2 x B1 - THEN: Impossible configuration. Decrease B4 or increase B1.
IF: B3 < A6 - THEN: Impossible configuration. Increase B3.
IF: B2 ≥ 1/2 x B1 - THEN: Impossible configuration. Decrease B2.

Calculated Dimensions

	HG28	HG38
C1		
C2		

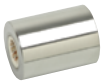
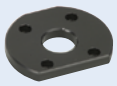
C1 = 2 x (A16 + B2)
IF: C1 > (B1 – 10)
THEN: Gear Shaft is too long. Increase B1 (total shut height).
C2 = (B4 + A10) – (A4 + A5 + A6)
IF: C2 < A2
THEN: Nut Housing is too short. Increase B1 (total shut height).
IF: C2 > A3
THEN: Need special Nut Housing, longer than A3.
IF: C2 > 1/2 x B1 – (A4 + A5 + A6 + A19)
THEN: Nut Housing is too long. Increase B1 (total shut height).

CAD reference point

Configuration Calculation Sheet available from **DME** Applications Engineering to help determine the lengths of the Helical Gear Shaft and Nut Housing based on mould size, and required parting line openings per side.

HELICAL GEAR
HELICAL GEAR COMPONENTS

HG

Helical Gear Components	
	Helical Gear Shaft
	Nut Housing Blank
	Nylon Nut
	Tapered Roller Bearing
	Roller Bearing Housing
	Nut Housing End Cap
	Alignment Rod
	Shipping Strap

CAD reference point