

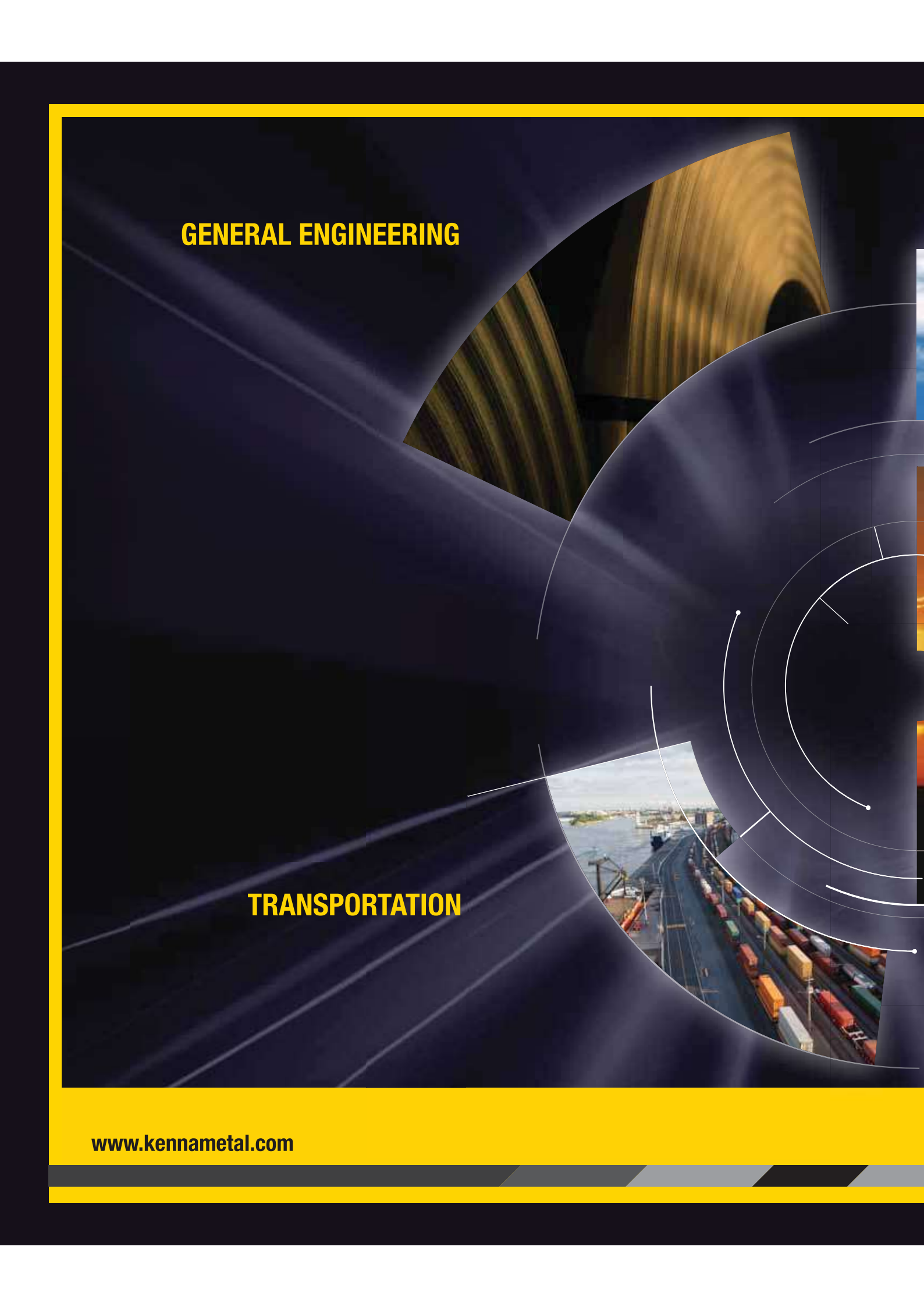
INNOVATIONS **MASTER CATALOG**

TOOLING SYSTEMS
2013



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GENERAL ENGINEERING

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AEROSPACE & DEFENSE

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ERICKSON™ HC Hydraulic Chuck Sleeves • Drilling

Primary Application

ERICKSON Hydraulic Reduction Sleeves are specially designed for high-precision clamping of straight cylindrical cutting tool shanks. The self-sealing design enables efficient use of through-coolant cutting tools when the cutting tool shank completely engages the full gripping length of the sleeve.

Features and Benefits

- One-piece design with slot configuration to seal coolant.
- Cutting tool must be cylindrical and have a through hole when using coolant.
- Capable of up to 100 bar (1,500 psi) coolant pressure.
- Cutting tool shank requirement tolerance is h6 and $Ra \geq 0,3 \mu m$ (12 μin) surface finish.
- Maximum collapse is h6.



How Do Catalog Numbers Work?

Each character in our catalog number signifies a specific trait of that product. Use the following key columns and corresponding images to easily identify which attributes apply.

ERICKSON



20MHC160M

20

System Size

12 = 12mm
20 = 20mm
32 = 32mm
50 = 1/2"
75 = 3/4"
12 = 1-1/4"

M

System Value

M = Previous two numbers built in metric values

HC

Sleeve Style

HC = Hydraulic Chuck

160

Sleeve Bore Size

metric (xx.x)

010 = 1mm
160 = 16mm
250 = 25mm

inch (x.xxx)

0125 = 1/8"
0500 = 1/2"
1000 = 1"

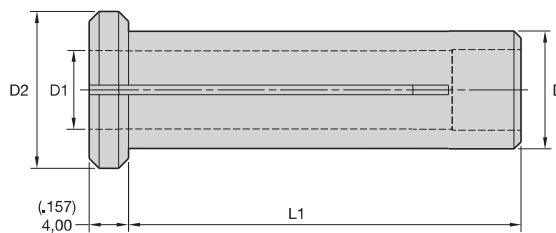
M

Identification Value

M = Sleeve bore size built to metric values
(blank) = Sleeve bore size built to metric values



- One-piece design with slot configuration to seal coolant.
- Cutting tool must be cylindrical and have a through hole when using coolant.
- Sleeve must be inserted completely into the hydraulic chuck until shoulder mates against the hydraulic chuck front face.
- Cutting tools must be in full contact with the sleeve length (L1).



ERICKSON

■ Metric with Metric Bores

D1	12HC D = 12mm D2 = 16mm L1 = 40mm	20HC D = 20mm D2 = 25mm L1 = 50mm	25HC D = 25mm D2 = 30mm L1 = 56mm	32HC D = 32mm D2 = 36mm L1 = 60mm
3,0	12MHC030M	20MHC030M	25MHC030M	—
4,0	12MHC040M	20MHC040M	25MHC040M	—
5,0	12MHC050M	20MHC050M	25MHC050M	—
6,0	12MHC060M	20MHC060M	25MHC060M	32MHC060M
7,0	12MHC070M	20MHC070M	25MHC070M	32MHC070M
8,0	12MHC080M	20MHC080M	25MHC080M	32MHC080M
9,0	12MHC090M	20MHC090M	25MHC090M	32MHC090M
10,0	12MHC100M	20MHC100M	25MHC100M	32MHC100M
11,0	—	20MHC110M	—	32MHC110M
12,0	—	20MHC120M	25MHC120M	32MHC120M
13,0	—	20MHC130M	—	32MHC130M
14,0	—	20MHC140M	25MHC140M	32MHC140M
15,0	—	20MHC150M	—	32MHC150M
16,0	—	20MHC160M	25MHC160M	32MHC160M
17,0	—	—	—	32MHC170M
18,0	—	—	25MHC180M	32MHC180M
19,0	—	—	—	32MHC190M
20,0	—	—	25MHC200M	32MHC200M
22,0	—	—	—	32MHC220M
25,0	—	—	—	32MHC250M

(continued)

(HC Hydraulic Chuck Sleeves continued)

■ Metric with Inch Bores

D1	20HC D = 20mm D2 = 25mm L1 = 50mm	32HC D = 32mm D2 = 36mm L1 = 60mm
3/16	20HCM0188	—
1/4	20HCM0250	—
5/16	20HCM0312	—
3/8	20HCM0375	—
7/16	20HCM0438	—
1/2	20HCM0500	32HCM0500
9/16	20HCM0562	32HCM0562
5/8	20HCM0625	32HCM0625
11/16	—	32HCM0688
3/4	—	32HCM0750
7/8	—	32HCM0875
1	—	32HCM1000

■ Inch with Metric Bores

D1	50HC D = .500 D2 = .630 L1 = 1.575	75HC D = .750 D2 = .984 L1 = 1.969	12HC D = 1.250 D2 = 1.417 L1 = 2.362
3,0	50HC030M	75HC030M	—
4,0	50HC040M	75HC040M	—
5,0	50HC050M	75HC050M	—
6,0	50HC060M	75HC060M	—
8,0	50HC080M	75HC080M	—
10,0	50HC100M	75HC100M	—
12,0	—	75HC120M	—
14,0	—	75HC140M	—
16,0	—	75HC160M	12HC160M
18,0	—	—	12HC180M
20,0	—	—	12HC200M
25,0	—	—	12HC250M

■ Inch with Inch Bores

D1	50HC D = .500 D2 = .630 L1 = 1.575	75HC D = .750 D2 = .945 L1 = 1.969	12HC D = 1.250 D2 = 1.417 L1 = 2.362
1/8	50HC0125	75HC0125	—
3/16	50HC0188	75HC0188	—
1/4	50HC0250	75HC0250	—
5/16	50HC0312	75HC0312	—
3/8	50HC0375	75HC0375	—
7/16	—	75HC0438	—
1/2	—	75HC0500	12HC0500
9/16	—	75HC0562	12HC0562
5/8	—	75HC0625	12HC0625
11/16	—	—	12HC0688
3/4	—	—	12HC0750
13/16	—	—	12HC0812
7/8	—	—	12HC0875
1	—	—	12HC1000

NOTE: Inserting the cutting tool less than the full gripping length (L9) of the sleeve can permanently damage the sleeve and hydraulic chuck. Full length of the gripping bore needs to be maintained to achieve maximum accuracy, safety, and coolant sealing feature.