TORQUE AVGINANTED CORE GRUCK

Highest Roll Weight Capacity

Highest Torque Capacity

Low Maintenance

No Core Burnout or Slippage

No End of Roll Waste

The EHDL model provides 40% more contact area for increased gripping performance.

DOUBLE E COMPANY, LLC

Excellence in Engineering

BACKGROUND

The DF–2000 is the world's best-selling shaftless core chuck. It

delivers numerous cost saving and productivity increasing benefits which other chucks simply cannot match. The chuck is easy to care for and extremely dependable.

TORQUE-ACTIVATED DESIGN

The DF–2000's patented torque-activated design is simple and effective. Six precision ground steel rollers are mechanically linked to travel up and down bi-directional ramps created by the back of the jaws and the hexagonal cam.

- Minimizes friction.
- Used in the lightest to heaviest tension applications.
- Eliminates the complexity of pneumatic or hydraulic chucks.
- Rotary unions are not necessary.

BENEFITS OF THE DESIGN

The DF–2000 **automatically lifts and centers the roll**.

- Roll bounce is eliminated.
- Web tension is easily controlled.
- Parts replacement is rare.
- Lubrication is unnecessary so dust does not accumulate.
- No need for maintenance, no jamming and consistent, easy removal of spent cores.



Patented roller expansion of the DF–2000 reduces friction to assure concentric expansion and long life.



Less efficient torque activated chucks slide on flattened surfaces increasing friction and wear within the chuck.

Serrated jaws damage cores.

NO SIDEARM FORCE

The DF–2000 uses torque for expansion and smooth jaws to grip the core.

- No penetration of the internal wall.
- Cores can be reused.
- Rolls can be run down to the last wrap.
- Eliminates dust.
- Decrease in maintenance and downtime.

Double E DF-2000 core chucks are available in many sizes and configurations.

Double e

COMPANY

D2 TOOL STEEL

Increased longevity.

Highest torque capacity.

AVAILABLE

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ROLLER DESIGN

The DF–2000 works with an advanced low friction roller design, while competing torque-activated chucks use sliding ramps for activation. These chucks can't overcome the friction created by the roll weight to lift and center the roll. A non-centering action results, causing roll bounce and possible jamming.



VERSATILITY OF DESIGN STEP CHUCKS SAVE TIME WHEN RUNNING MULTIPLE CORE SIZES



- Ideal for applications that require multiple core sizes and where roll stand width capacity is not a concern.
- Available in any size, with the base chuck being the largest.
- Usually mounted to the roll stand with a custom flange.



8" BASE CHUCK (chuck can be any size) Top chuck mounts on the base chuck in a "Quick Disconnect" design.

- Easily and quickly swap top chucks if running multiple core sizes.
- Leave top chuck permanently mounted if only two core sizes are being used.

Step chucks allow machines to run any two core sizes interchangeably. When running the larger size core, the entire chuck fits inside. When running the smaller size, the core stops at the flange between the two chucks.

WHEN ROLL STAND WIDTH CAPACITY IS LIMITED, QUICK DISCONNECT CHUCKS FACILITATE CORE SIZE CHANGES

- Quick changes among a variety of core sizes.
- Swap on the fly with single center bolt.
- Ideal when roll stand width capacity is limited and changes of core sizes are frequent.



AUTOMATIC CORE EJECTION



The Double E "Core Kicker" features a core ejection device which kicks the core off the chuck as the roll stand opens. CHUCK ADAPTERS

Slide-on adapters are possible when multiple core sizes are used, quick changeovers are needed, and roll weights are not prohibitive.





Blow hole option available for easy cleaning.

DF-2000[®] PRODUCT SPECIFICATIONS





PRODUCT INFORMATION ON STANDARD FLANGE MOUNTED CHUCKS

The DF-2000 can be made in virtually any size. This chart only contains information on common sizes.

CORE SIZE	2.80	3.00	3.00	3.00	3.94	3.94	4.72	4.72	5.00	5.00	5.90	5.90	6.00	6.00	8.00	10.00	11.81
IN. [mm]	[70.0]	[76.2]	[76.2]	[76.2]	[100.0]	[100.0]	[120.0]	[120.0]	[127.0]	[127.0]	[150.0]	[150.0]	[152.4]	[152.4]	[203.2]	[254.0]	[300.0]
TYPE	STD	SHORT	STD	EHDL	STD	STD	STD										
COLLAPSED	2.72	2.98	2.98	2.98	3.89	3.89	4.67	4.67	4.94	4.94	5.83	5.83	5.93	5.93	7.88	9.84	11.65
DIA. IN. [mm]	[69.0]	[75.7]	[75.7]	[75.7]	[98.8]	[98.8]	[118.6]	[118.6]	[125.5]	[125.5]	[148.0]	[148.0]	[150.6]	[150.6]	[200.2]	[250.0]	[296.0]
EXPANDED	2.95	3.27	3.27	3.27	4.20	4.20	4.99	4.99	5.25	5.25	6.16	6.16	6.25	6.25	8.31	10.41	12.40
DIA. IN. [mm]	[75.0]	[83.1]	[83.1]	[83.1]	[106.7]	[106.7]	[126.7]	[126.7]	[133.4]	[133.4]	[156.5]	[156.5]	[158.8]	[158.8]	[211.1]	[264.4]	[315.0]
DIAMETER	3.70	3.97	3.97	3.97	4.97	4.97	5.71	5.71	5.97	5.97	6.97	6.97	6.97	6.97	9.00	11.00	12.8
"A" IN. [mm]	[94.0]	[100.8]	[100.8]	[100.8]	[126.2]	[126.2]	[145.3]	[145.3]	[151.6]	[151.6]	[177.0]	[177.0]	[177.0]	[177.0]	[228.6]	[279.4]	[325.1]
DIAMETER	5.59	5.85	5.85	5.85	6.87	6.87	7.80	7.80	7.97	7.97	8.00	8.00	9.00	8.85	10.87	12.87	14.87
"B" IN. [mm]	[141.9]	[148.6]	[148.6]	[148.6]	[174.5]	[174.5]	[198.0]	[198.0]	[202.4]	[202.4]	[203.2]	[203.2]	[228.6]	[225.0]	[276.1]	[327.0]	[377.5]
DIAMETER "C" MIN. IN. [mm]	4.61 [117.1]	4.87 [123.5]	4.87 [123.5]	4.87 [123.5]	5.87 [149.0]	5.87 [149.0]	6.78 [172.0]	6.78 [172.0]	6.87 [174.5]	6.87 [174.5]	6.81 [173.0]	6.81 [173.0]	8.00 [203.2]	7.85 [199.5]	9.87 [250.5]	11.87 [301.5]	13.87 [352.5]
"D" MIN.	1.00	1.00	1.00	1.00	1.06	1.19	1.06	1.26	1.06	1.26	1.13	1.22	1.13	1.22	1.19	1.19	1.06
IN. [mm]	[25.4]	[25.4]	[25.4]	[25.4]	[27.0]	[30.2]	[27.0]	[32.0]	[27.0]	[32.0]	[28.7]	[31.0]	[28.7]	[31.0]	[30.0]	[30.0]	[26.9]
"E" MIN.	1.00	.74	1.00	1.00	.92	.92	.76	.89	.76	.89	.43	.65	.43	.65	.62	.65	.65
IN. [mm]	[25.4]	[18.8]	[25.4]	[25.4]	[23.5]	[23.5]	[19.3]	[22.6]	[19.3]	[22.6]	[10.9]	[16.5]	[10.9]	[16.5]	[15.8]	[16.5]	[16.5]
"F"	4.00	2.84	4.11	5.28	4.11	5.11	4.11	5.61	4.11	5.61	4.11	5.61	4.11	5.61	4.11	4.11	4.11
IN. [mm]	[101.6]	[72.1]	[104.4]	[134.1]	[104.4]	[129.8]	[104.4]	[142.5]	[104.4]	[142.5]	[104.4]	[142.5]	[104.4]	[142.5]	[104.4]	[104.4]	[104.4]
MAX. TORQUE PER CHUCK INCH-LB. [NM]	3800 [420]	3800 [420]	5600 [630]	6300 [710]	8600 [980]	12000 [1400]	11300 [1300]	18000 [2000]	12000 [1400]	18000 [2000]	18000 [2000]	18000 [2000]	18000 [2000]	18000 [2000]	24000 [2700]	28800 [3300]	36000 [4100]

NOTES:

1. Minimum torque to engage per chuck (INCH-LB) = Roll Weight (LB) x .2 or (NM) = Roll Weight (KG) x .05.

2. Dimensions B, C, D, E, and pilot dimensions specified by customer.

- 3. Tabulated minimums for dimensions B and C apply if 1/2-13 or M12 S.H.C.S. are used.
- 4. Minimum dimension D may vary depending on pilot dimensions.
- 5. Dimensions C and D may be less than tabulated minimums with "scalloped retainer" option.

DF-2000 SPECIFICATIONS

Company:		Date:
Name:	Title:	
Address:		
City/State/ZIP:		
Telephone:	Fax:	email:
What type of chuck do you use	e now and what problems are you trying	to solve?
CORE SPECIFICATIO	N5	
Core Material: Paper/Cardboar	d 🗅 Steel 🗅 Aluminum 🗅 Plastic 🗆	Steel Capped 🖵 EE Composite 🖵 Other 🖵
Core Inside Diameter:	Core I. D. Tolerance ±:	Number of Core Reuses:
ROLL SPECIFICATIO	V5	
Max. Roll Weight:	Max. Roll Diameter:	Max. Roll Width:
Max. Tension (lb./linear in.):	Max Web Speed (ft./min.):	Web Thickness/Wt.:
Web Material: Board 📮 Pap	oer 🗅 Film 🖵 Foil 🖵 Other:	
Min. Emer. Stopping Time:	Acceleration Time:	Deceleration Time:
Koll Stand Manufacturer:		
Max. Opening Distance betwee	en Roll-Stand Mounting Flanges:	
Unwind \Box Rewind \Box	Single Brake/Drive 🖵 Dual Bi	rake/Drive
SPECIFICATIONS FO	R STANDARD	"H"→ "A" thread, "B" places, equally spaced on a "C" diameter belt inclo
FLANGE MOUNTED U	CHUEK	
"A" Thread Size:	"B" Places Equally Spaced:	
"C" Diameter Bolt Circle:	"D" Arbor Pilot Diameter:	"G" Dia
"E" Pilot Depth Female:	"F" Pilot Width Male:	
"G" Spindle Flange O.D.:		
		"F" Roll Stand
QUICK DISCONNECT	MOUNTING	
Double E can provide an ADAI	PTER PLATE to allow your flange type an	rbor to accommodate
Single-Center-Bolt / Dowel Pin	Type "Quick Disconnect" multiple size	CORE CHUCKS FOR QUICK CHANGEOVER.

SPECIFICATIONS FOR STUB-ARBOR MOUNTING

SPECIFICATIONS FOR	TUB-ARBOR MOUNTING	"K"——	-		Spindle
"I" Arbor Length:	"J" Arbor Diameter:	,, −, ⊢ []			_ Brake or
"K" Key Length:	"L" Key Width:	. "M"-			Drive
"M" Distance Between Key Top / Sl	naft Bottom:	"N" Thread x "O" DP.	"J" Dia. ┘		
"N" Center Thread Size:	"O" Center Thread Depth:		— "I" <u> </u>	Roll St	and

NOTE: Double E stub-arbor mount chucks require a CENTER TAPPED HOLE,

minimum 5/8" (16mm) diameter to ensure structurally adequate and safe stub-arbor mounting.

The arbor must be in good condition, with uniform diameter to enable a close fit of the chuck onto the arbor; typically .002" (.05mm) diametral clearance to .0012" (.03mm) diametral interference. The key requires a close clearance fit. If the arbor has a shoulder, the chuck should be bored deep enough to permit clamping against the shoulder. THIS MOUNTING CONFIGURA-TION IS NOT RECOMMENDED IF FREQUENT CHUCK REMOVAL, TO CHANGE OVER SIZE, IS REQUIRED. An adapter plate can be made, as mentioned above, to convert the roll stand to either flange mount or quick disconnect.

THE DF-2000 CORE CHUCK



JAWS MADE FROM TOUGH CASE-HARDENED ALLOY STEEL

U.S. & FOREIGN PATENTS ISSUED & APPLIED FOR

FEATURE	ADVANTAGE	BENEFIT				
Smooth Grinning Jourg	Interior wall of core is not damaged.	Multiple core reuse.				
Smooth Gripping Jaws	Serrations are not used so dust is not created.	No maintenance or jamming, no contamination.				
		Less core distortion and no end-of-roll waste.				
Torque Activation	Extreme sidearm force is not necessary.	Rolls won't bow.				
		Less roll stand fatigue; extended roll stand life.				
	Reliable grip regardless of torque magnitude.	Run heavy and/or light rolls with any tension.				
		Roll bounce is minimized or eliminated.				
Potented Poller Design		Easier to control web tension.				
Patenteu Koner Design	Lubrication isn't needed; dust won't accumulate.	No jamming; chuck won't get stuck in cores.				
	Little friction inside chuck; less wear on parts.	Little, if any, maintenance and longer chuck life.				
	Wide range of expansion.	Run butt rolls and rolls with core inconsistencies.				
Step Design	Single chuck can run various core sizes.	Roll changes are effortless; even between sizes.				
Quick Disconnect Design	Interchangeable chucks mount to same plate on machines with width limitations.	One center bolt allows quick change to various core sizes.				



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