

## FORCE-LIMITING STEP CHUCKS 5C, 16C AND 20C

Built-in force control to safely grip

# *Thin-wall Parts*

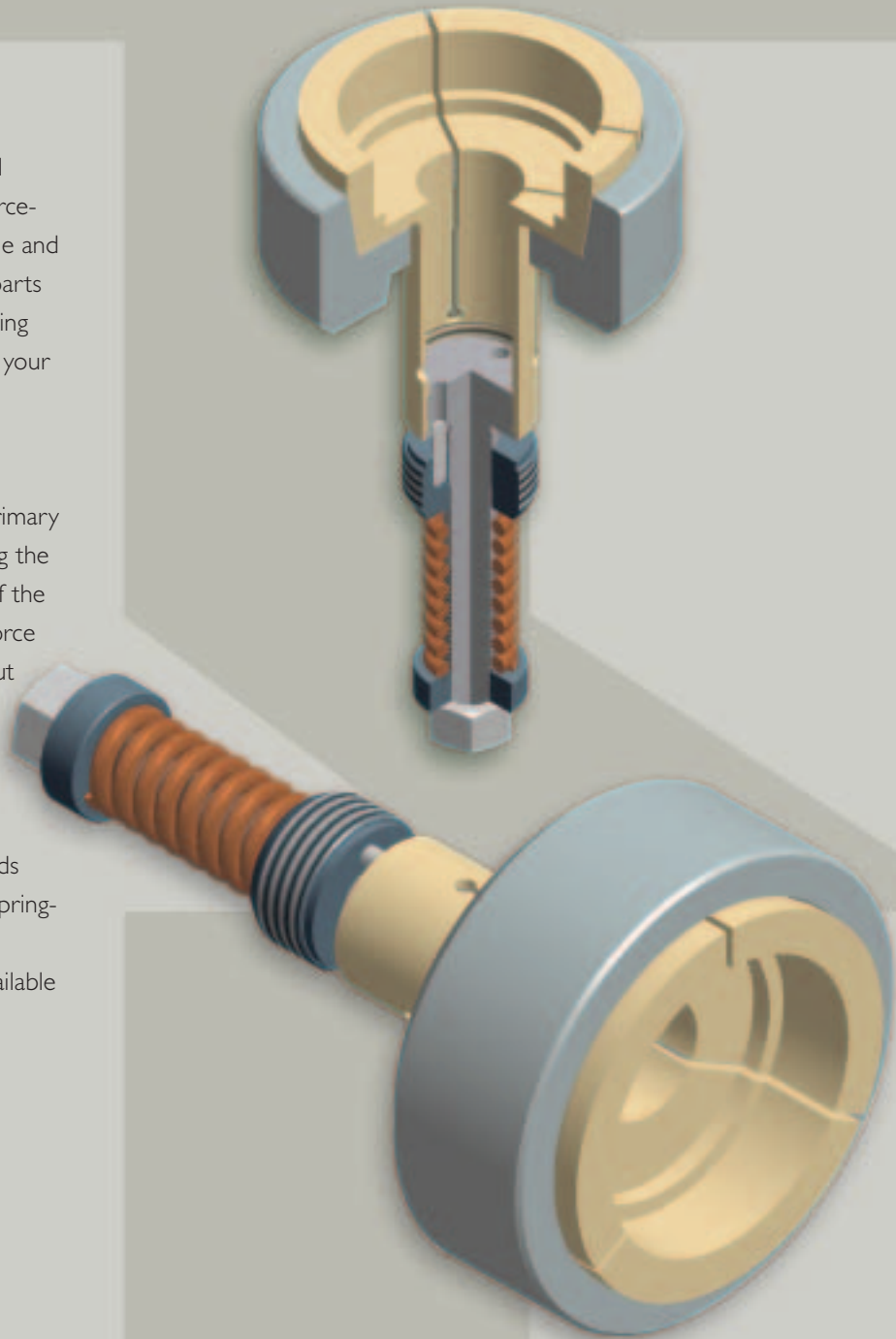
Take the headache out of thin-wall turning with the new Hardinge Force-Limiting Step Chuck. Maintain inside and outside concentricity of thin wall parts in a fail-safe process while eliminating the nuisance of manually tweaking your draw bar force.

Hardinge's force-limiting concept incorporates a die spring as the primary closing mechanism. Simply changing the spring size for the wall thickness of the workpiece will vary the gripping force to maximize holding power without crushing the workpiece.

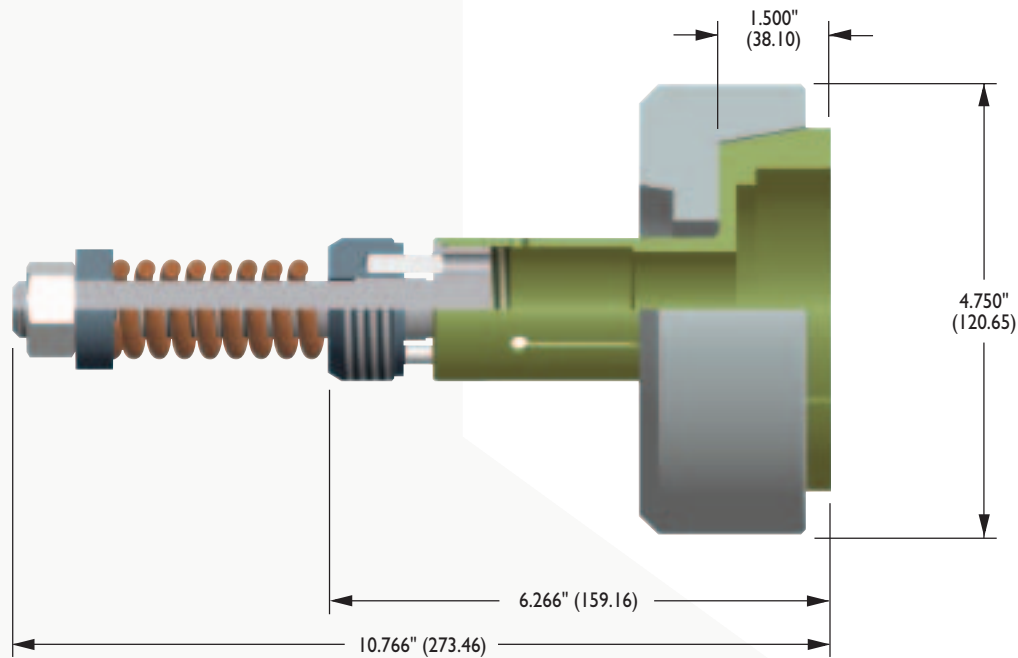
Hardinge's Force-Limiting Step Chucks are hardened and ground and ordered to size. Threads are heat-treated and the body is spring-tempered to assure accuracy and durability for long life. Sizes are available in 5C, 16C and 20C for Hardinge CNC lathes.

Patent Applied For.

Renderings shown in color to emphasize components.



# Force-Limiting Step Chucks



Individually manufactured to required diameter and bore size. Set of five springs included with each assembly for gripping force adjustment. Millimeters in parentheses.

Fail-safe thin-wall turning

Maintain ID and OD concentricity

Up to 6" workpiece diameter

Increased cycle time

Excessive grip force on a thin-wall part can easily create a part that is out-of-round on both inside and outside surfaces. Hardinge's new Force-Limiting Step Chuck takes the headache out of thin-wall turning. The assembly adjusts the grip in a fail-safe process while eliminating the nuisance of manually adjusting your draw bar force.

Hardinge's force-limiting concept incorporates a die spring as the primary closing mechanism. The closer will bottom out before the die spring reaches its solid height. The assembly comes with five color-coded springs with instructions and

related gripping forces. Simply change the spring from job to job according to the wall thickness of your workpiece. Selecting the appropriate size spring will vary the gripping force to maximize holding power without crushing the workpiece.

Since the actuation of this system is force independent from the machine draw bar, closing cycle times are not affected at low pressure settings.

Expect more from your workholding. Hardinge builds in features to eliminate manual labor, saving you time and money. Force-Limiting Step Chucks made to order in 5C, 16C and 20C sizes for Hardinge CNC Lathes.

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