

LATHE BAR PULLER

- EASY AUTOMATION** — bmi CAD uses Markforged to print feed stock automation tools for a CNC lathe.
- TURRET MOUNTED** — Each puller is turret mounted and uses friction to extend heavy metal feedstock.
- CUSTOMIZABLE** — Onyx and Fiberglass allow bmi CAD to produce highly customized in-house pullers.
- MASSIVE SAVINGS** — bmi CAD prints bar pullers **75x cheaper** and **18x faster** with Markforged technology.

The Printed Part

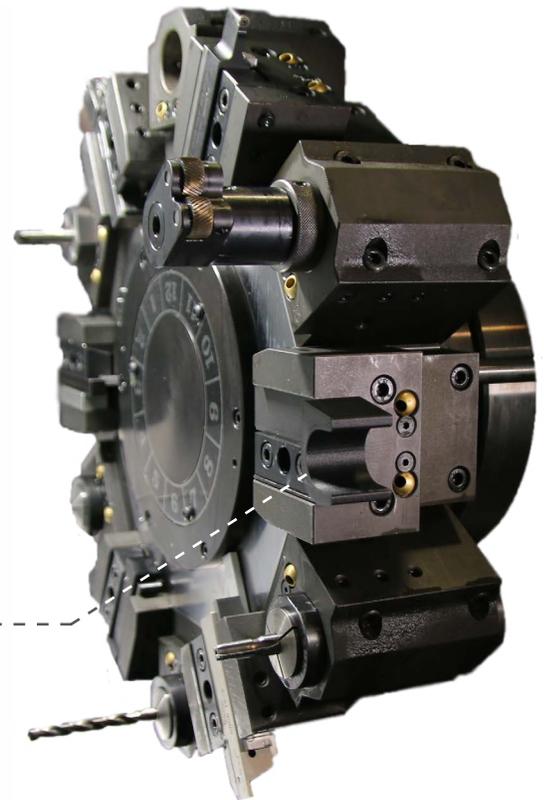


A FLEET OF FIXTURES

Because bar pullers are so affordable to print, bmi CAD can print a wide variety of different puller geometries to accommodate different stock sizes and shapes.

SEAMLESS INTEGRATION

Each bar puller bolts onto a tool holder on the CNC lathe's turret, allowing bmi CAD to seamlessly automate their turning operations.



Effortlessly Customizable

Conventional CNC lathe bar pullers are a workaround — they replace \$10k - \$30k automatic stock feeding systems with a turret mounted part. However, they're still expensive and not purpose built to stock specifications. By printing a unique bar puller for each type of stock, bmi CAD found a cost effective, stock specific solution that leverages Onyx's surface and Fiberglass' strength to improve performance.

| | PURCHASED | MARKFORGED | SAVINGS |
|-----------------------|-----------|------------|---------|
| Procurement Lead Time | 1 week | 8 hrs | 94% |
| Total Part Cost | \$1,000 | \$13 | 99% |