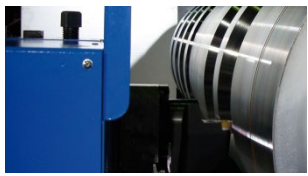


## Nucor Steel Texas Herkules Modernization of Dainichi Lathe with Automated Roll Loader



## HerkulesGroup – The Specialists for Large Machine Tools



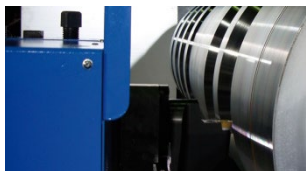
**Who Are We & What Are We Doing**



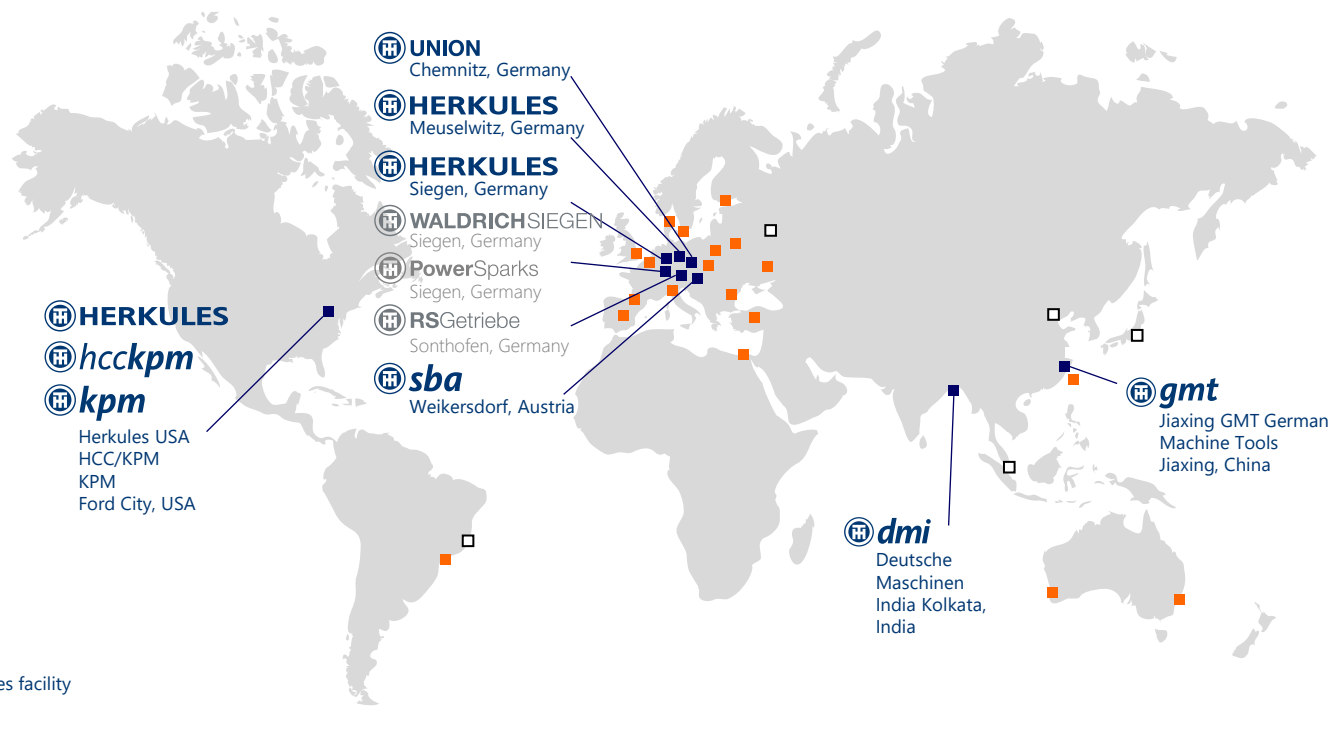
**HERKULES USA - Your Partner In North America**

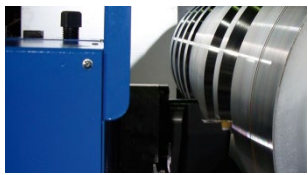


**Automated Roll Loader - Rebuilt Dainichi Lathe**



## HerkulesGroup – Production, Service & Sales Facilities

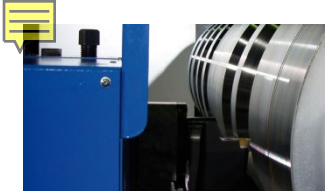




## HerkulesGroup – Herkules USA & HCC/KPM



- Location: Ford City, PA (USA)
- Employees: 125
- Foundation: 1985
- Product portfolio:
  - Roll grinders
  - Lathes
  - Modernizations
  - Roll shops



## Herkules USA: Custom Solution for your Complex Problems

**125+**

Passionate hearts ready for any of your challenges

**30+**

Years of knowledge and experience in the Remanufacturing Business

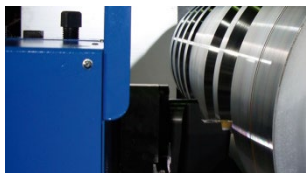
**150+**

Successfully remanufactured and installed machines in North America

**4**

OEM for four industry known brands





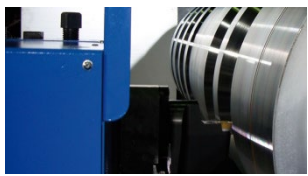
## Our Mission: Bringing Your Machine back to as NEW Status

### We not only want to only rebuild...

- We not only disassemble, inspect and repair worn parts...
- Our goal is not only to restore equipment to its functionality...
- Not striving for the quick and less costly repair

### ...but remanufacture your machine

- ...but restore components to the original specifications or often improve them
- ...but improving performance to even exceed original specifications
- ...but for delivering machine in as-new-condition with state-of-the-art technology



## Typical Types of Remanufacturing Approaches – Everything is Possible



### Full Remanufacturing

- Electrical & Mechanical
- Control Upgrade
- Measuring Devices



### Partial Remanufacturing

- Partial Mechanical Rebuild
- Electrical & Control Upgrade
- Measuring Devices



### Electrical Remanufacturing

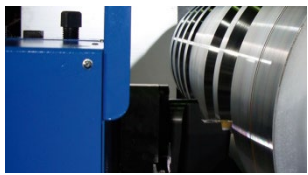
- Electrical Components
- Control Upgrade
- Measuring Devices



### "Creative" Remanufacturing

- Partial New Build
- Any Combination Possible
- Measuring Devices

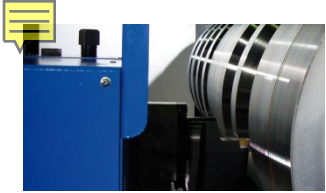




## State of the art Machine Shop

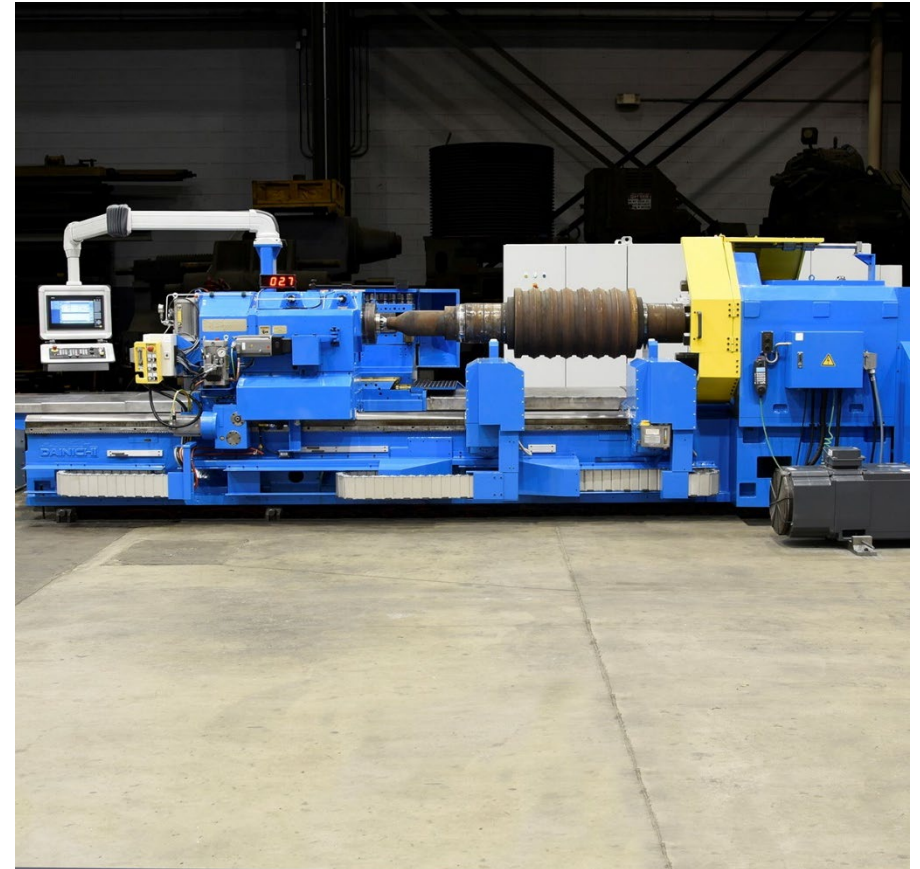
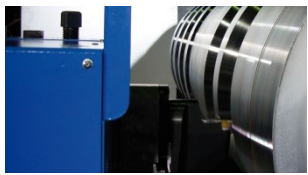




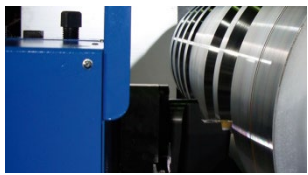


## State of the art Machine Shop

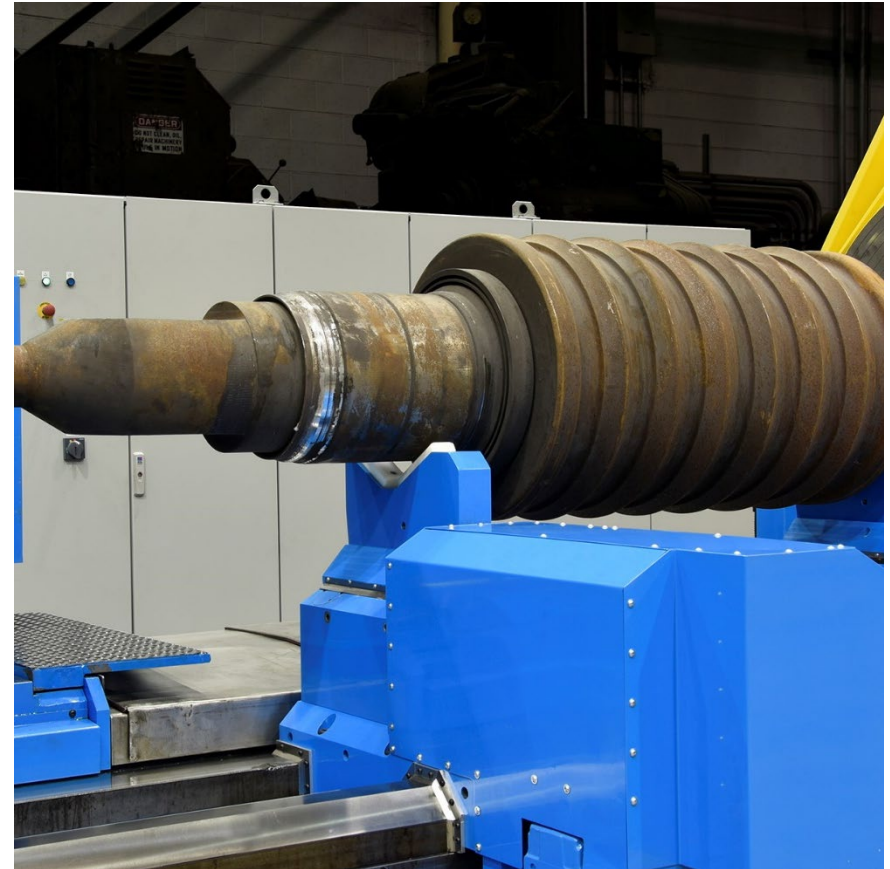


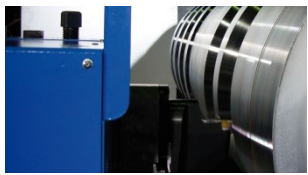




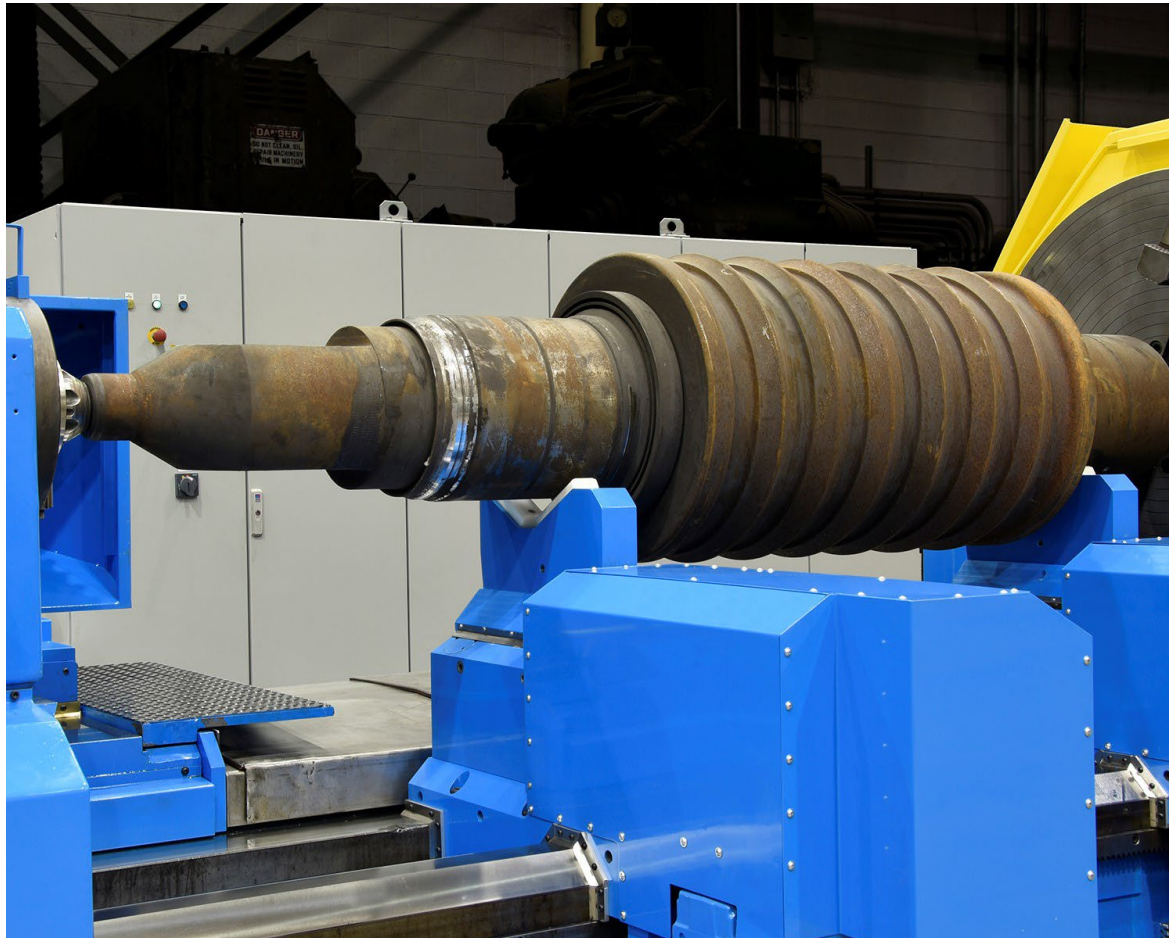


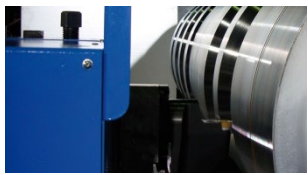
## Automated Roll Loader designed with the help of Nucor Steel Texas





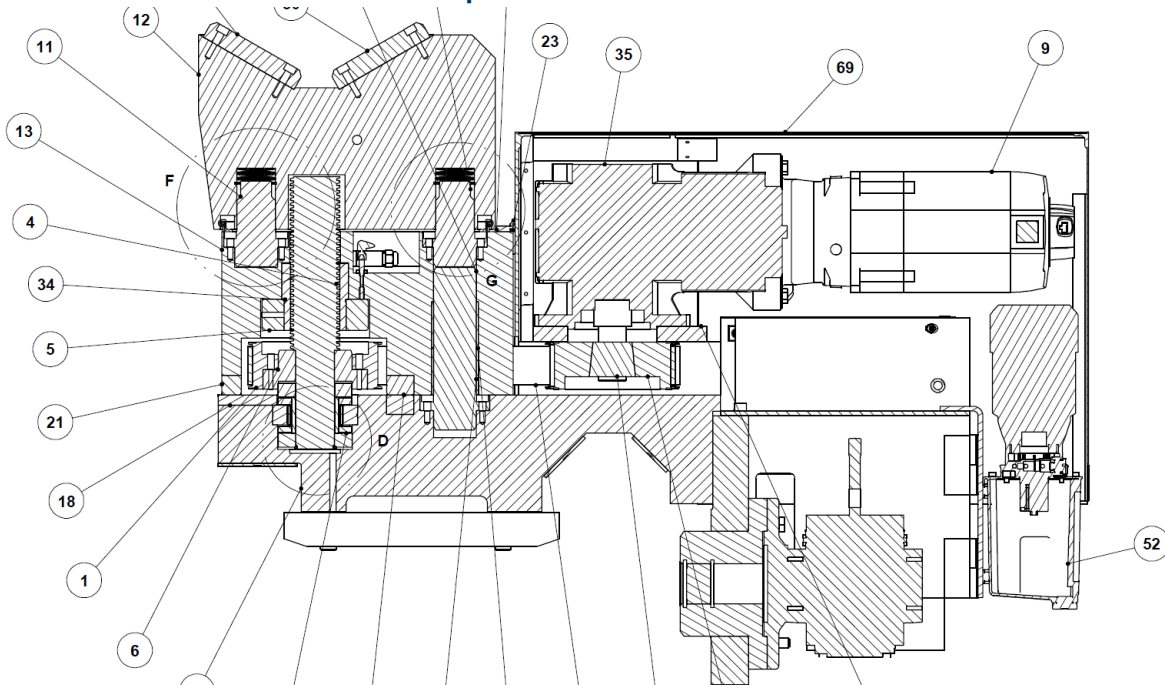
## Automated Soft Loaders

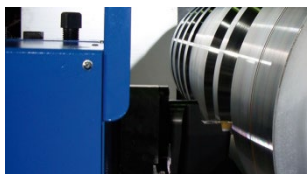




## Key Mechanical Design Features

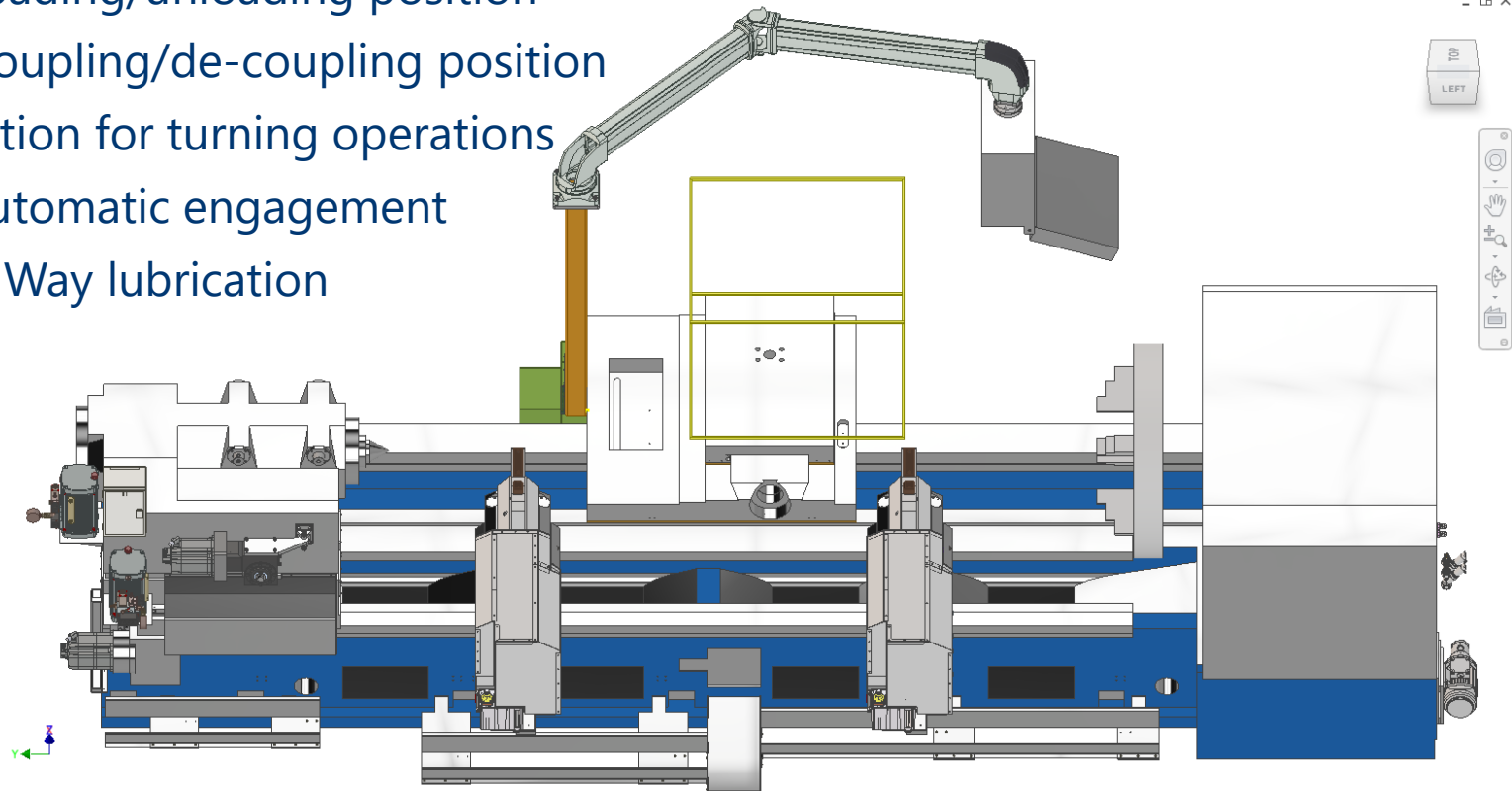
1. Low profile, designed with ease of loading in mind in a “No Touch” environment
2. Design Simplicity:
  - Robust construction that can take occasional impacts
  - Ease of maintenance
  - Minimizing spare parts
  - No messy hydraulics
  - Self contained systems
3. Design adaptability to various machine profiles



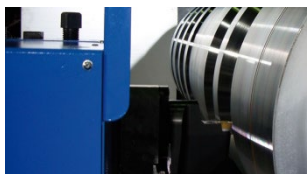


## Functional Features

1. Automatic Z-axis and height positioning
  - For roll loading/unloading position
  - For roll coupling/de-coupling position
  - Park position for turning operations
2. Tailstock automatic engagement
3. Automatic Way lubrication

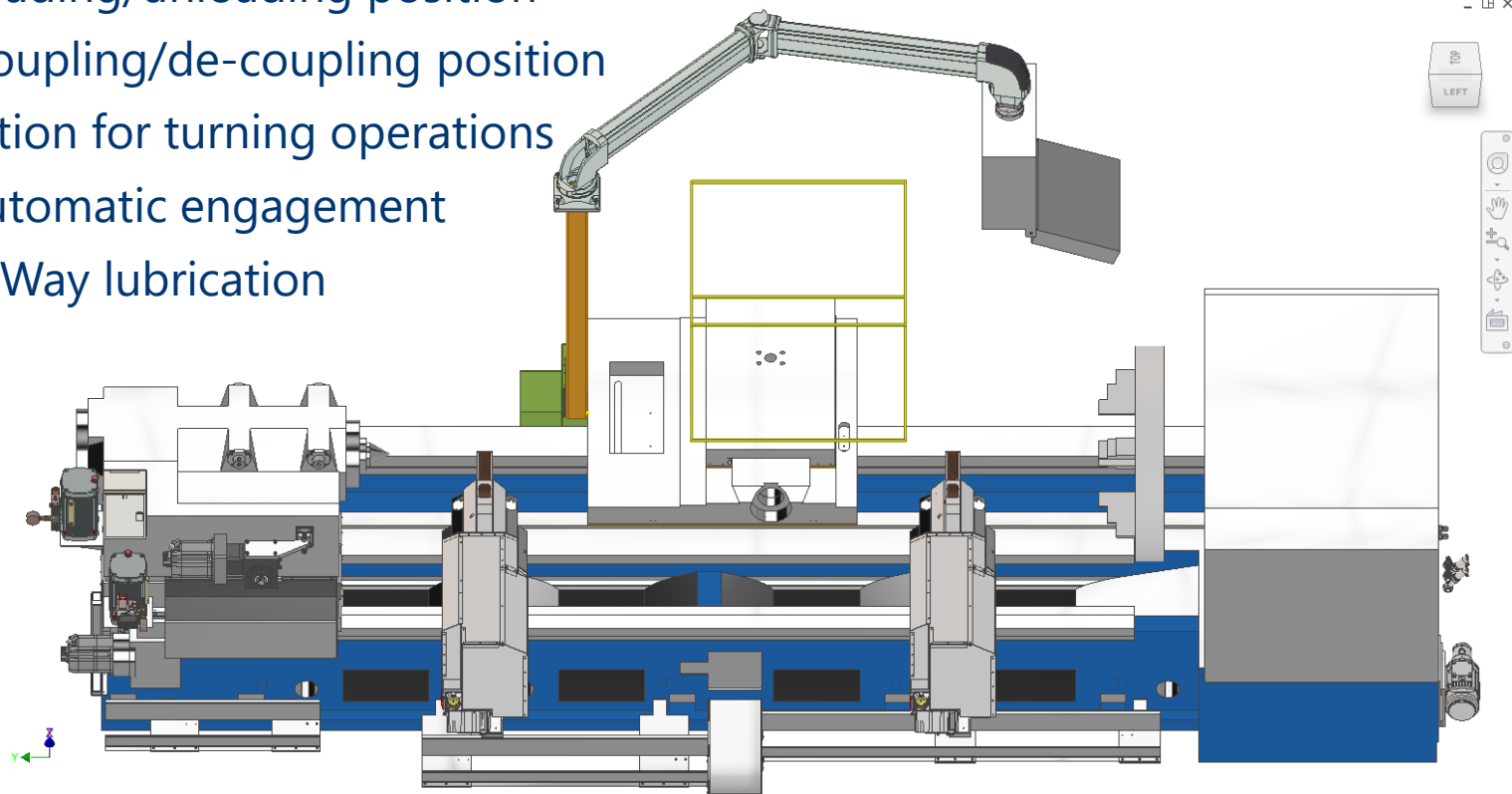


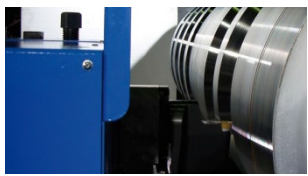




## Functional Features

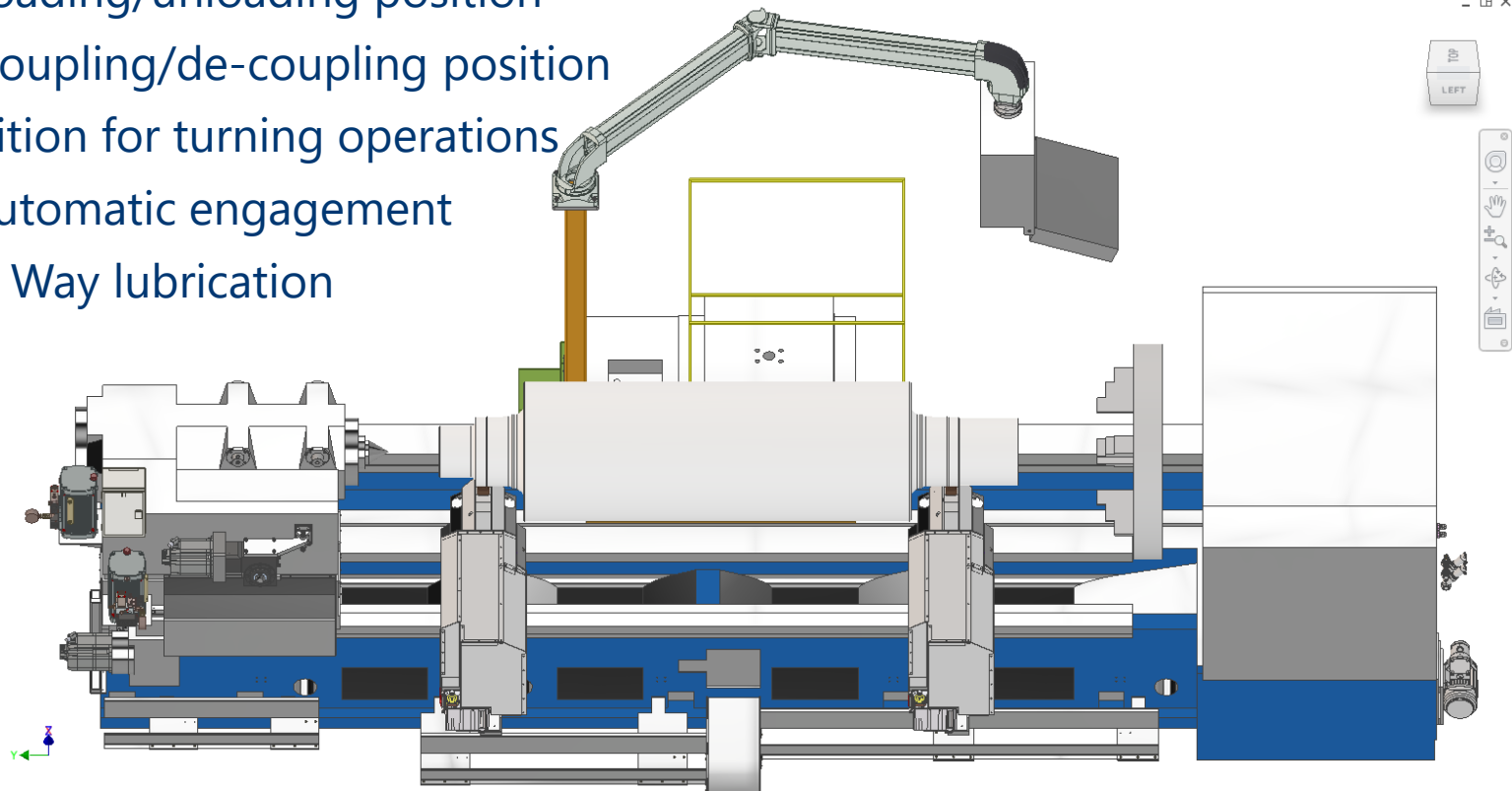
1. Automatic Z-axis and height positioning
  - For roll loading/unloading position
  - For roll coupling/de-coupling position
  - Park position for turning operations
2. Tailstock automatic engagement
3. Automatic Way lubrication

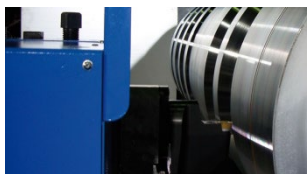




## Functional Features

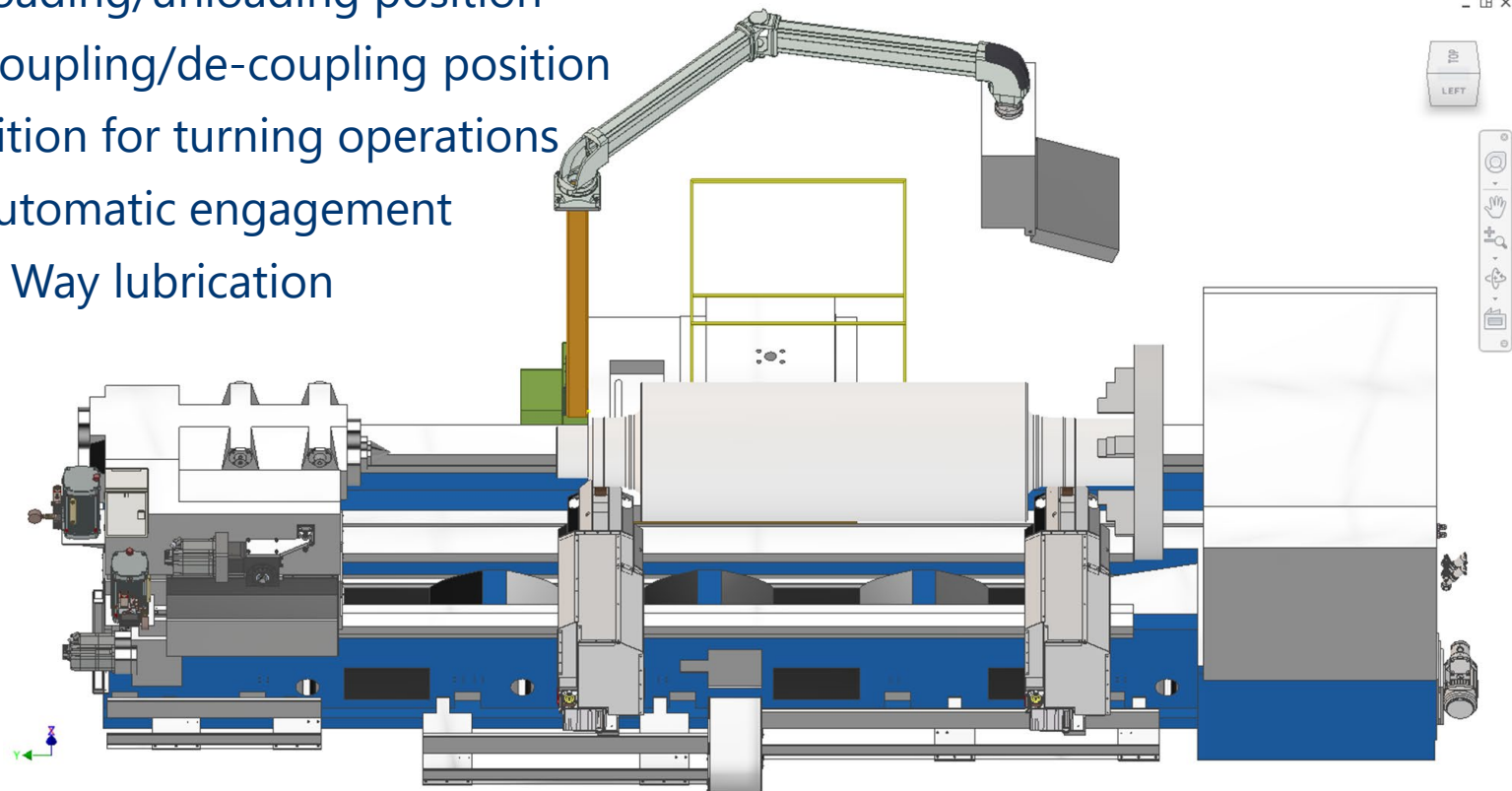
1. Automatic Z-axis and height positioning
  - For roll loading/unloading position
  - For roll coupling/de-coupling position
  - Park position for turning operations
2. Tailstock automatic engagement
3. Automatic Way lubrication

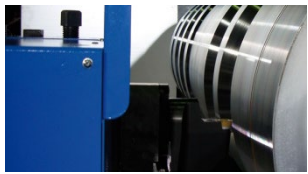




## Functional Features

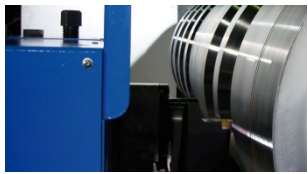
1. Automatic Z-axis and height positioning
  - For roll loading/unloading position
  - For roll coupling/de-coupling position
  - Park position for turning operations
2. Tailstock automatic engagement
3. Automatic Way lubrication





## Control Features

1. Simple roll setup process
  - Jog to location and teach position in the control
  - 1 time setup for each roll
2. Step by Step control programing
  - Allows for various levels of automation
  - Verification checks by operator for each movement



# Questions?