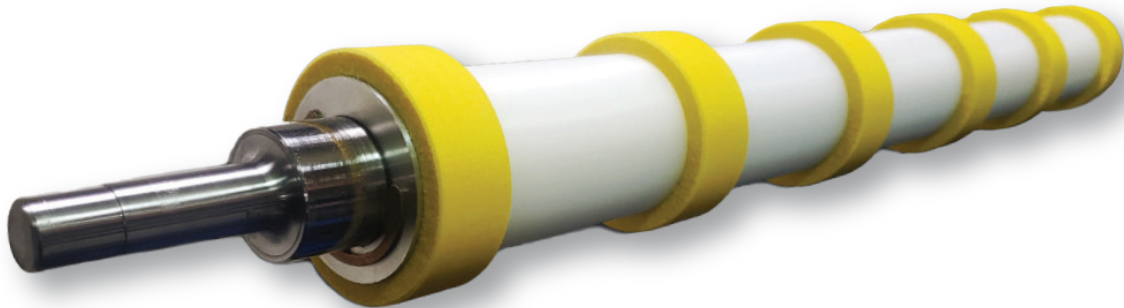




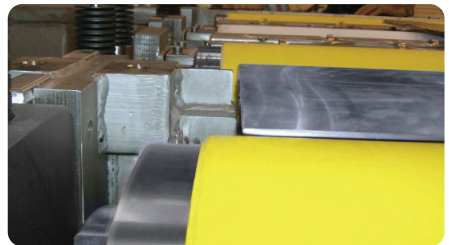
Introducing the **VALUE+** upgrade for the maintenance of automotive press and blanking lines

LONG-LIFE TRANSPORT ROLL ASSEMBLIES



Custom engineered skate wheels and table rolls to exceed in cross brush and electrostatic oil machines

NCCM has developed and engineered rolls designed to exceed in cross brush cleaners and electrostatic oiler machines. Typically these machines are equipped with urethane rolls that need to be changed out constantly. Our **VALUE+** nonwoven wheels made with our NCCM® Premier Yellow material outperform every other roll on the market.



Non-Chunking | High Coefficient of Friction | Durable | Non-Marking

NCCM® TRANSPORT ROLL ASSEMBLIES PRODUCT SUMMARY

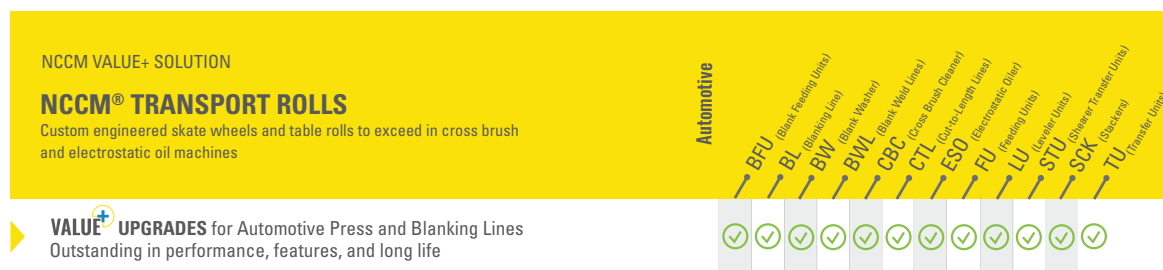
Custom engineered skate wheels and table rolls to exceed in cross brush and electrostatic oil machines

VALUE upgrades for

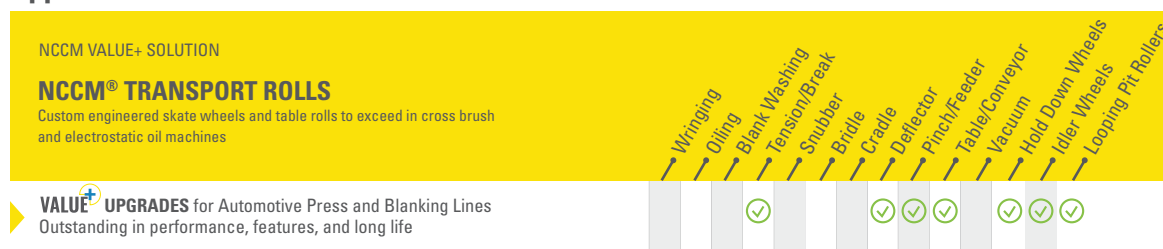
Automotive Press & Blanking Lines

Transport rolls are a high-performance product for a variety of applications. These rolls provide a positive return on investment with life far beyond rubber or polyurethane rollers and an excellent performance-to-cost ratio. Built on world-leading yellow nonwoven roll know-how, this product will take applications requiring friction and durability to the next level.

Process Lines

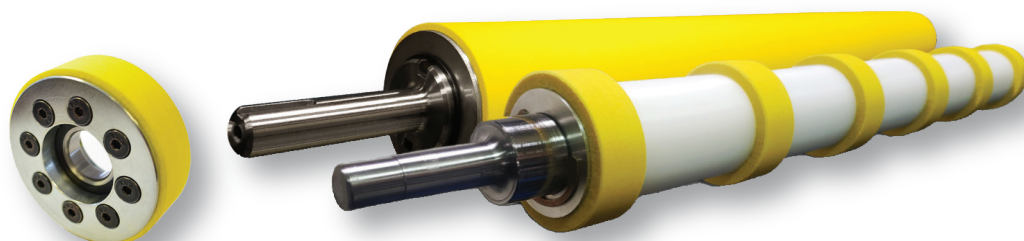
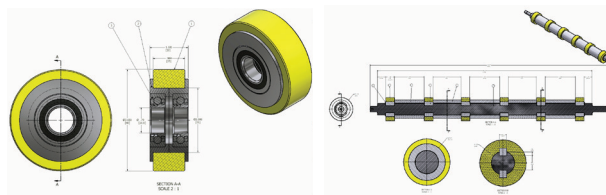


Applications



Designs

- NCCM® TRANSPORT ROLLS**
- Single and double bearing designs available
 - Can be custom designed to suit many custom applications
 - Idler and driven assemblies available
 - Manufactured complete and ready to install



Features/Benefits

NCCM® TRANSPORT ROLLS	FEATURES	BENEFITS
	<ul style="list-style-type: none"> • Long-lasting nonwoven material • Non-marking • Rebuildable assemblies • Durable • High coefficient of friction • Cut resistant • Porosity • Chunk out resistant 	<ul style="list-style-type: none"> • Multiple densities available • No added tooling costs • Can be sized according to customer specifications • Won't delaminate • Improved performance • More blank contact/complete blank contact • Softer material = less risk of damage • Blanks don't flip • Major improvement for maintenance • Roll life dramatically improved • Process quality significantly improved • Perfectly straight blank steering • Noise absorption

Technical Specifications

NCCM® TRANSPORT ROLLS	DENSITIES	MAX. TEMPERATURE
	7N *Other densities upon request	approx. 140°C (284°F)
NCCM® TRANSPORT ROLLS	SIZES	MAX. OPERATING PRESSURE
	Max. rolls size: 647,7mm (25.5") OD; 457,2mm (18") ID Min. roll size: 50,8mm (2") OD; 25,4mm (1") ID	60N/mm (342 PLI)
NCCM® TRANSPORT ROLLS	FLUIDS	
	Water, oils and many different fluids in the pH range of 2–10. For example: <ul style="list-style-type: none"> • N-Butyl acetate • Cellosolve acetate • Isobutanol • Toluene • MEK • Isopropanol • Trichloroethane • Methylene chloride • Perchloroethane • Hexane • Trichloroethylene • Hydrocarbon oils • Petroleum oils • Synthetic oils 	

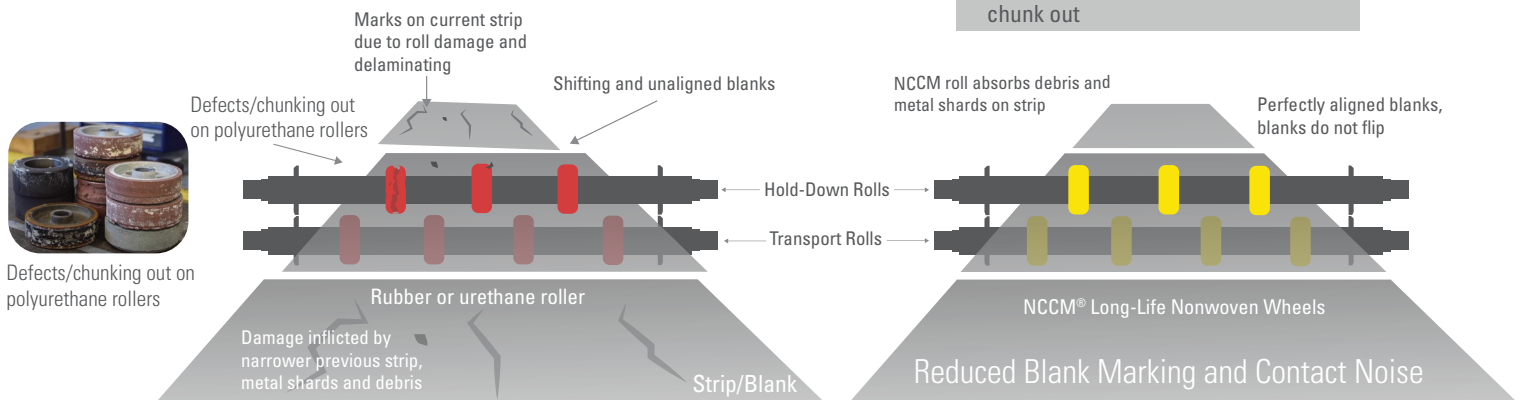
** All charts are meant to give an overview and do not provide formal guarantees for any application. Please contact an NCCM representative at sales@nccmco.com for further insight, questions, recommendations, and technical support. **

FEATURES

NCCM® Transport Rolls are a value-add in countless metal sheet processing applications in primary metals and automotive stamping plants. They are designed to replace rubber and urethane that need to be changed out constantly. Key factors separate NCCM nonwoven rolls from the competitions' products. These features stem from NCCM's proprietary bonded sleeve construction.

LONG LIFE

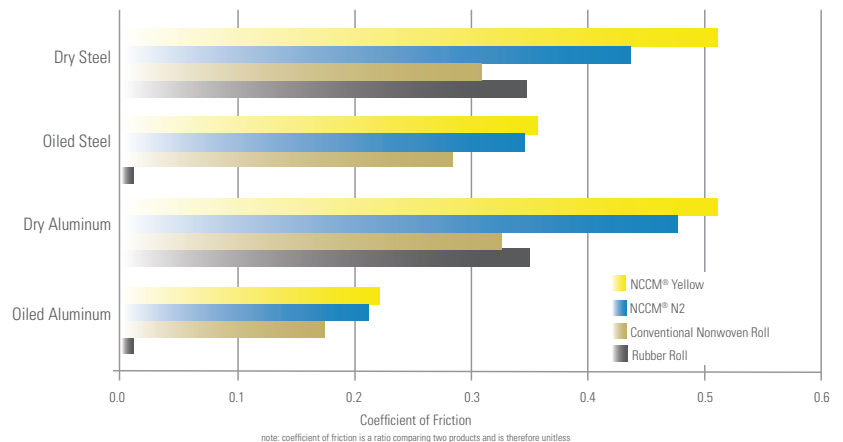
Several characteristics, such as durability, compressibility, and resistance to damage, contribute to the NCCM feature of long life. Due to NCCM rolls' life-long high performance, fewer inferior replacement rolls are needed. Even at expensive upfront costs, investment in high-quality NCCM rolls ends up costing less than continuous smaller payments toward frequently-replaced rolls. Longer roll life and high performance translates into less money spent and can make an impact on your bottom line.



- NCCM rolls resistant to cuts and tears
- Resistance contributes to long life and high performance of roll
- Nonwoven material reduces contact noise
- Long-life nonwoven wheels do not chunk out

HIGH COEFFICIENT OF FRICTION

NCCM nonwoven rolls excel in coefficient of friction above and beyond competing rubber and urethane rolls. NCCM rolls' porosity and individually-bonded nonwoven disc construction allow them to absorb excess fluid and debris, decrease strip/blank slippage, increase product grip, and provide perfect durability and hold power for hold-down rolls.





NCCM® New Skate Wheel Design Could Boost Performance and Life in Specialized Applications

Case Study 016

Executive Summary

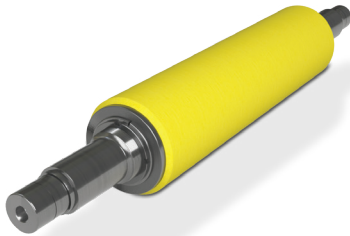
NCCM® Neutral Premier Yellow being used in a small skate wheel application can be utilized in a variety of value-add applications, including a trial for welded blanks. The customer machine builder used the application design to hold down blanks during the welding process and in a bar straightening and grinding equipment.

About NCCM

NCCM Company produces nonwoven mill roll covers for the OEM, primary metals, automotive and industrial markets. NCCM® Skate wheels are used for hold down and blank driving applications in demanding environments.

Featured Product

NCCM® Premier Yellow
The Proven High-Value Nonwoven Roll



The yellow original—outstanding in technical features, performance and service life

Key Features

- ✓ Long Life
- ✓ High Coefficient of Friction

Specialized Skate Wheel Design Applications provide the life and durability of the NCCM® Neutral Premier yellow product in high volume, demanding, specialized applications. This is a new endeavor, and exact results and performance are still in trial

NCCM Company Marketing and Sales Team
Edward Bryzelak, Technical Sales and Service
Kyle Swanson, Product Development Supervisor
Published by Morgan Seifert, Mktg Coordinator
Revision #1, 15 June 2020

Initial Challenge

The customer had problems with maintenance costs of continually replacing the current competitor's low-cost polyurethane hold down skate wheels that had high-cost machine assemblies. NCCM provided a whole new build design that utilized the NCCM® Premier Yellow product, which had rebuildable assemblies and the NCCM® Premier Yellow product. It provided a far superior coefficient of friction that reduced slipping and other failures, causing quality issues.

Desired State

The customer wanted to have a roll build assembly that could be refurbished instead of single-use. Also, a product with a longer life and a higher coefficient of friction would provide superior improvements in maintenance costs.

Custom-Engineered Solution

A few variations of the design have been proposed and trialed, with possible lower-cost options using injection mold nylon body and retainers or 3D printed designs. The current trialed solution is the steel repairable fixturing with the NCCM covering as well as a special grooving grind on the NCCM® Premier Yellow cover.

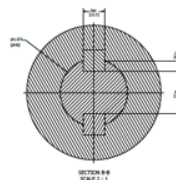
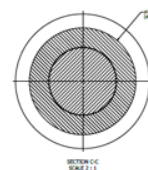
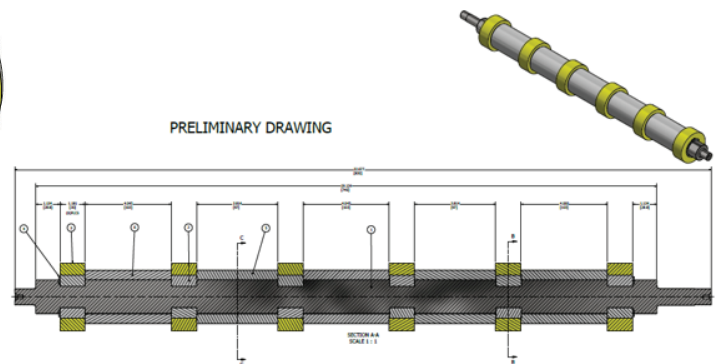
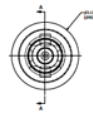
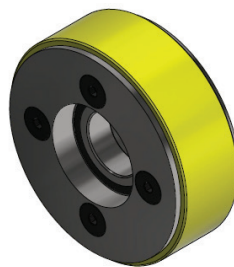
Result and Customer Value-Add

The new design and fixturing is still in the trial phase with good initial results. Looking for further information and data to see what the next steps are.

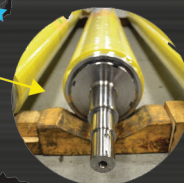
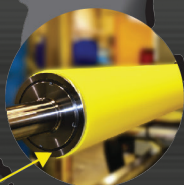
Take Action

Stop wasting time and money on lower quality rolls. Do not hesitate to visit NCCMCO.com, reach out to sales@nccmco.com, or call +49 151-2540-4346.

Supporting Charts and Graphs



NOTE:
ASSEMBLY WEIGHT ~ 19.437LBS



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20+ VARs to service your rolls locally in all major automotive and metals processing markets around the globe.

INTERNATIONAL SALES AGENCIES

Sales agents in Mexico, Canada, the Czech Republic, Germany, Turkey, France, and the United Kingdom.

Contact sales@nccmco.com to connect with your local sales representative, VAR, sales agent, distributor, or roll service center.