

Reverse Engineering – SDI TECHNICAL SERVICES

SDI can perform Reverse Engineering as a project service, giving you control over the longevity of your equipment.

Industrial equipment challenges.

As industry changes, so do the products. Equipment becomes obsolete and the **cost of replacement equipment can be daunting** – so can the cost of alterations required to accommodate new equipment into old locations. SDI's Reverse Engineering can be the ideal solution.

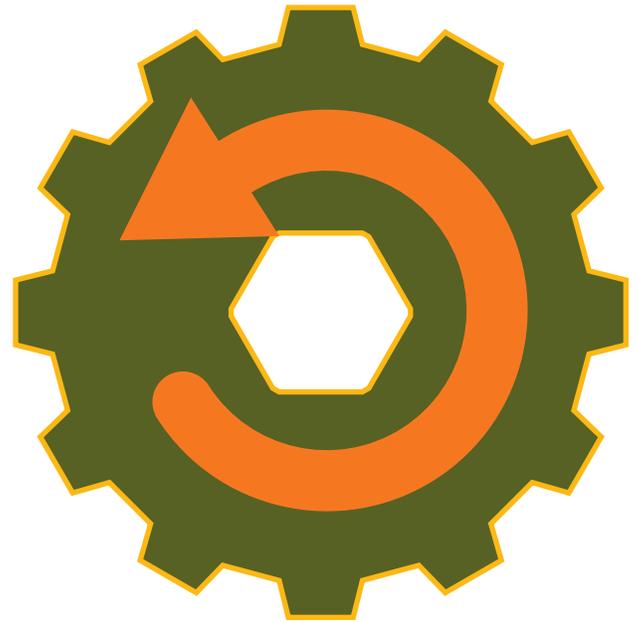
Do these issues sound familiar?

- The older equipment produces a better product
- Spare parts are no longer available
- Equipment is custom-built – and 40+ years old
- OEM parts are expensive and/or long lead-time
- The OEM part needs to be modified
- You'd prefer to build your own equipment but don't have the means
- You want to replace your custom/obsolete equipment with standard items but need to make them fit

Way beyond copy and paste.

Our design experts dedicate the time to understand the function and fit of each part (or piece of equipment) to ensure the replacements are equal or better quality. Often in the reverse engineering process, SDI suggests methods to manufacture the part in a way that's stronger, or more cost effective, or fits the service better – **or ALL the above.**

By understanding the function of the items and using 3D Scanning, SOLIDWORKS® modeling, and a network of SDI-approved machine shops, we can ensure that your parts are **designed and built to your exact specifications.** Good as new. Or better.



Potential benefits of using SDI.

- Improved uptime
- Capital spending eliminated
- Reduced cost
- Reduced lead-times
- Greater control over the longevity of your assets

Typically impressive cost savings.

Cost savings from proper Reverse Engineering are **immediate, and widespread.** They come in the form of engineering time, downtime elimination, piece-price savings, and elimination of capital expenditures. Without exaggeration, we deliver typical project **savings between \$10,000 and \$150,000.**

If you're **looking to gain more control** over the longevity of your equipment, look to SDI.



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3D Scanning – SDI TECHNICAL SERVICES

SDI can perform 3D Scanning as a project service, to reproduce parts and equipment that were previously difficult to measure.

Industrial equipment challenges.

As industry changes, so do the products. Equipment becomes obsolete and the **cost of replacement equipment can be daunting**. 3D Scanning gives you the precision accuracy needed to produce your parts with confidence – and savings.

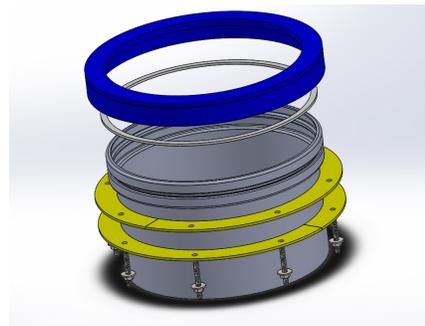
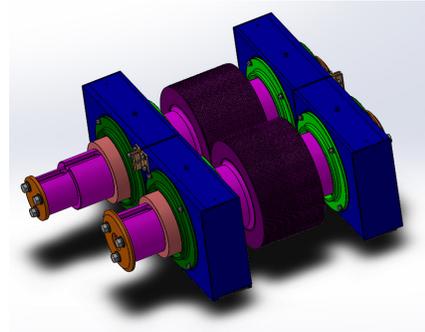
Do these issues sound familiar?

- Equipment is becoming obsolete
- Spare parts are no longer available
- Equipment is custom-built – and 40+ years old
- OEM parts are expensive and/or long lead-time
- The OEM part needs to be modified
- Your part is too complex to measure using standard measurement tools

Way beyond copy and paste.

Our design experts dedicate the time to understand the function and fit of each part (or piece of equipment) to ensure the replacements are equal or better quality. Our 3D Scanning process produces a solid model that can be tested in a simulation to ensure strength. Parts can also be customized or upgraded to meet your specific needs.

By understanding the function of the items and using 3D Scanning, SOLIDWORKS® modeling, and a network of SDI-approved machine shops, we can ensure that your parts are **designed and built to your exact specifications**. Good as new. Or better.



Potential benefits of using SDI.

- Parts can be replicated so legacy equipment does not need to be replaced
- Reduced cost
- Reduced lead-times
- Greater control over the longevity of your assets

Typically impressive cost savings.

Cost savings from 3D Scanning are **immediate, and widespread**. Savings come in the form of engineering time, downtime elimination, piece-price savings, and elimination of capital expenditures. Project **savings between \$1,000 and \$100,000** are common.

If you're **looking to efficiently reproduce** parts and equipment, look to SDI.



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Material Master/ Bill of Materials

– SDI TECHNICAL SERVICES

SDI can create Material Masters (MM) and Bills of Material (BOM) to provide accurate equipment data always in the right location.

Industrial equipment challenges.

Equipment design and manufacturing changes continually – making it difficult to maintain accurate data. Historical data can be lost during software upgrades, and parts often sit unmanaged in storehouses waiting to be consumed – risking damage, corrosion, and loss. **Recording accurate data on all equipment, parts,** and linking the parts to the correct equipment is a fundamental building block for any Reliability Program.

Do these issues sound familiar?

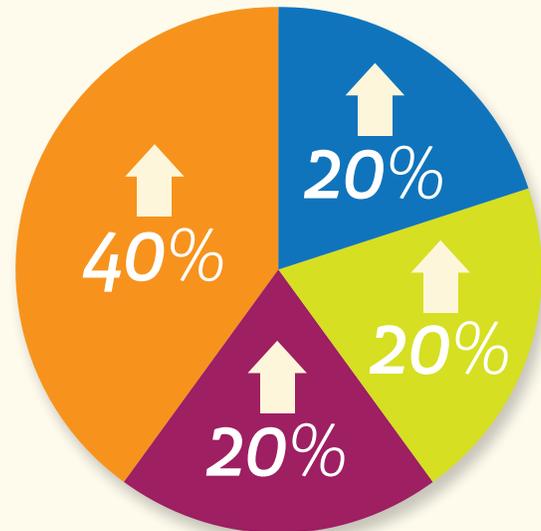
- Highly skilled craftspeople are searching for parts
- Spare parts are no longer available
- Bills-of-Material area incomplete or inaccurate
- OEM parts are expensive and/or long lead-time
- The OEM part needs to be modified
- You expedite parts or supplies only to find out they were available in another area

More than just the basics.

Our experience over a broad range of industries can help you with more informed decision-making. Our Technical Services engineers can assist your team in developing material data that goes beyond a basic description. **Accurate data is the cornerstone of any maintenance and reliability program,** but capturing and maintaining all that data is cumbersome and requires resources that you may not have available. Let SDI fill that gap. Material creation, updating information, and bill-of-material creation are all tasks that SDI can help with – all to drive your operation's effectiveness.

Procurement Cost Increases – *without BOMs*

- Select vendor
- Confirm received part
- Generate and Fax PO to vendor
- Deliver to shop



Potential benefits of using SDI.

- Maximize tool-in-hand time for craftspeople
- Uptime improvement
- Cost and lead-times reduced
- Expediting charges eliminated
- Gain control over the longevity of your assets
- Re-capture materials back into the storeroom so they can be consumed and kept in working order

Typically impressive cost savings.

Cost savings are **immediate, and widespread.** Savings come in the form of engineering time, downtime elimination, piece-price savings, expediting elimination, and part consolidation.

If you're **looking for data accuracy** throughout your entire operation, look to SDI.

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