#### TSURUMI: FOOLPROOF WAY TO RELIABILITY AND PROFITABILITY

Tsurumi submersible pumps are packed with parts and features that mitigate water ingress, overheating, and moisture buildup which are the common culprits of pump failure.



Watertight Cable Resin Gland prevents moisture/water from reaching the terminal box



Patented oil lifter ensures complete lubrication and cooling of seal faces



Thermistor built-in motor protector detects overheating caused by overcurrent

### MINIMISE PUMP FAILURE WITH PREVENTIVE MAINTENANCE SERVICES

The best way to keep your submersible pump working efficiently is to schedule periodic maintenance inspections with your pump professionals. All-Pumps have factory-trained experts who can visually inspect your pump systems. Remember, catching a problem early can result in a lower-cost repair rather than a replacement.



# PROBLEM

# **ROOT CAUSE**

# SOLUTION

Motor Temperature & Overheating

- Low/High supply voltage
- Voltage spike / surges
- Frequent motor starts and stops
- Purchase a pump with Bi-Metal Thermal Protection built into the motor
- Motor that matches the pump and duty required
- · Correct drop cable sizing
- Surge protectors

Operating Outside Best Efficiency Point

- Wrong pump selection
- Error in operation
- Operator misjudgment
- Determine the pump's BEP
- The rated operating point should be within 30% of the BEP

Water Penetration into Motor House

- Damaged pump cable
- Operating too long at the runout level
- Chemical incompatibility
- Make sure you check off everything going through the pump with a pump expert

**Broken Seal** 

- Aggressive fluid causing internal corrosion
- Substandard seal material
- Use of Silicon carbide mechanical seal
- Purchase a Pump with a Seal Oil Lifter so your mechanical seal doesn't run dry and fail
- Installing and periodic checking of seal fail circuit