



PIPE REPAIR BANDAGE



CASE STUDIES



www.piperepair.com.au



DIRECTIONS FOR USE

Rapp-it is the Ultimate Pipe Repair System for your temporary emergency pipe repair needs.



STEP 1: Shut down pipes or hoses. Apply gloves, then thoroughly clean and roughen the damaged pipe area. A clean, rough surface helps result in a successful repair.



STEP 2: Knead Steel Putty and apply firmly into the damaged area. Putty has a 2-5 minute work time, and the bandage application must begin during this time.



STEP 3: Soak bandage in fresh water for 10 seconds. Squeeze bandage 1–2 times while in water to help activation.



STEP 4: Quickly wrap the bandage around the damaged area, extending 50mm either side of the leak. Pull firmly throughout application. **A strong, tight repair is very important.**



STEP 5: With wet gloves, squeeze the bandage with a rotating motion until resin stops foaming and is set. Allow a minimum of 30 minutes for Rapp-it Bandage to set rock-hard. For best results, ensure bandage application is at least 10mm thick.

A successful pipe repair can be achieved in only 30 minutes.

FIVE CONVENIENT SIZES

PART No.

50mm x 3.6m (2" x 12') RAP 122

75mm x 3.6m (3" x 12') RAP 123

100mm x 3.6m (4" x 12') RAP 124

100mm x 4.8m (4" x 16') RAP 164

100mm x 9.0m (4" x 30') RAP 304



Rapp-it is intended as a temporary pipe repair for onsite emergency situations. Ultimately, usage and suitability of application is up to the discretion of the user.

Results may vary depending on pipe substrate, pipe size, pipe contents, damage type and size, and application technique. All appropriate PPE and safety measures must be followed. Always adhere to onsite safety policies. Refer to our SDS for further information – available at www.piperepair.com.au.

Please contact our office for further information or specific advice.



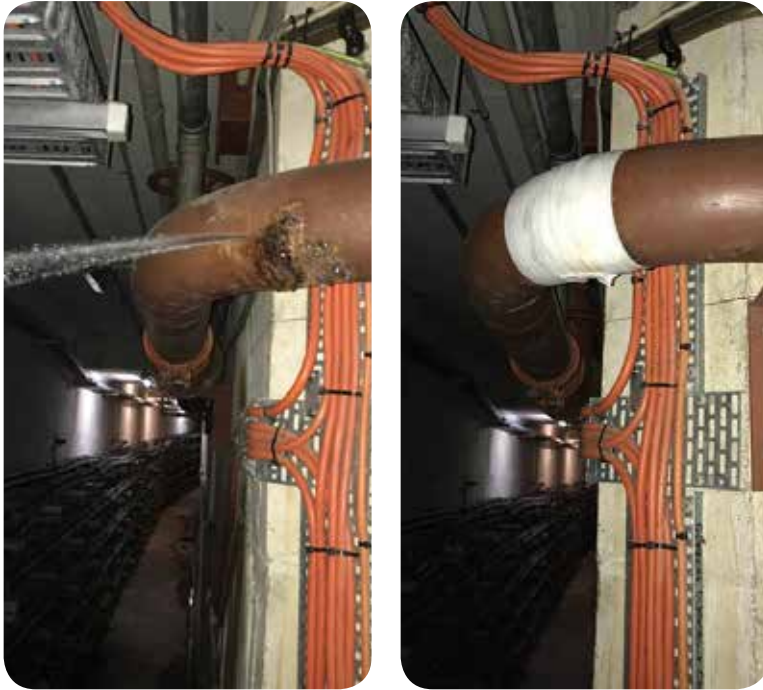
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HYDROELECTRIC POWER STATION CASE STUDY



“We recently applied the Rapp-It bandage repair kit to a leaking 4-inch water main pipe. Upon return to service of the pipe, no leakage was detected, and the water main line has remained in service allowing us to now long-term budget plan replacement of this section instead of an unplanned budget cost and replacement.”

Generation Technician
Hydroelectric Power Station, TAS

RAPP-IT PIPE REPAIR SOLUTION FOR HYDROELECTRIC POWER STATION

Rapp-it is suitable for use on corroded fluid lines, water reticulation pipelines and outflow pipes that are widely used in the hydroelectrical power stations.

SCOPE

The customer advised that they had an overhead leak in a 100mm water main line. The pipe required urgent repair, as the damaged area was dangerously close to electrical conduits which was creating a safety hazard.

SOLUTION

The customer reduced the line pressure and then cleaned and roughened the damaged area. The leak was plugged with Rapp-it Steel Putty and Rapp-it Pipe Repair Bandages (100mm x 4.8m) were applied over the top. The line was fully functional 30 minutes after application.



Pipe Substrate	Steel
Pipe Contents	Water
Internal Pressure (psi)	116 psi / 800 kPa
Temperature (°C)	7°C – 15°C
Pipe Diameter (mm)	100mm
Damaged Area (mm)	180mm



CONSTRUCTION SITE CASE STUDY



RAPP-IT PIPE REPAIR SOLUTION FOR CONSTRUCTION SITE

In the fast paced and cost sensitive construction industry, Rapp-it is ideal for emergency pipe repairs, as it can be applied to any size or type of pipe. Rapp-it is a more convenient alternative to stocking joiners and spare parts that you may never use.

SCOPE

The customer advised that they had a leak on a poly pipe water line feeding the job site. The pipe could not be shut down and required an urgent temporary repair, as the water spillage on the ground was creating a safety hazard for construction workers accessing the area.

SOLUTION

The customer decreased the line pressure and then cleaned the area. As the leak was located close to a poly joiner it was advised that Rapp-it be applied over the joiner to ensure the leak would be fully contained. Using Rapp-it Steel Putty and a Rapp-it Pipe Repair Bandage (100mm x 3.6m) applied over the joiner, the leak was successfully contained within 30 minutes with no further spillage onsite.

"Thanks for the service, a quick swift response."
Xenia Construction Contractors, QLD



Pipe Substrate	Poly Pipe
Pipe Contents	Water
Internal Pressure (psi)	100 psi / 690 kPa
Temperature (°C)	Ambient
Pipe Diameter (mm)	100mm



FOOD & BEVERAGE CASE STUDY



RAPP-IT PIPE REPAIR SOLUTION FOR FOOD PROCESSING

Currently, over 94% of sugar mills in Australia use Rapp-it for emergency pipe repair needs. Rapp-it is suitable for use on corrosive fluid and acid lines. It is ideal for use on the phosphoric acid lines commonly involved in the sugar milling process.

SCOPE

The customer advised that they had an overhead leak in a corroded line at 2am in the morning. The pipe required urgent repair, as water spillage on the ground was creating a safety hazard for staff accessing the area.

Pipe Substrate	Steel
Pipe Contents	Water
Internal Pressure (psi)	150 psi / 1034 kPa
Temperature (°C)	Ambient
Pipe Diameter (mm)	250mm
Damaged Area (mm)	180mm

SOLUTION

The pressure in the line was reduced and the corroded area was cleaned and roughened. The leak was stemmed with Rapp-it Steel Putty and Rapp-it Pipe Repair Bandages (100mm x 9m) applied over the top. The line was back up running at full capacity 30 minutes after application.

“We had an overhead leak in a corroded line at 2am in the morning. This could have shut down our production and needed urgent repair. Applying Rapp-it Pipe Repair Bandage meant that we could keep our operations functional during the night, avoiding downtime, and replace the pipe at a later time more convenient to us. Water spillage on the ground was also creating a safety hazard and this could have caused issues for our staff in accessing the area.”

Sugar Milling Facility, QLD





SYDNEY THEATRE CASE STUDY



RAPP-IT PIPE REPAIR SOLUTION FOR ICONIC AUSTRALIAN THEATRE

Rapp-it is suitable for use most substrates, including cement.

SCOPE

The customer advised that they had a leak in their 1992 vintage cement storm water run-off pipes. The pipes required urgent repair, as the damaged area was dangerously close to electrical, lighting and costumes. This was creating a safety hazard for all staff and patrons, as well as potentially damaging thousands of dollars' worth of costumes.

Pipe Substrate	Cement
Pipe Contents	Water run off
Internal Pressure (psi)	100 psi / 690 kPa
Temperature (°C)	10°C – 20°C
Pipe Diameter (mm)	100mm
Damaged Area (mm)	20mm

SOLUTION

After the customer stemmed the flow of water, cleaned and roughened the pipe, they used Rapp-it Steel Putty and a Rapp-it Pipe Repair Bandage (50mm x 3.6m) to seal the leak. The successful application ensured no risk to staff or patrons, or costume damage.

“The area affected is directly above the stage where hundreds of thousands of dollars in electronics, lighting, costumes and more are located, any water in this area would be disastrous for the production.

Anyway Rapp-it has sealed the leaks so ‘the show can go on!’”

Maintenance Manager
Iconic Sydney Theatre, NSW

“the show can go on!”





PAINT MANUFACTURING CASE STUDY



“Rapp-it successfully stemmed the flow of Texanol, we will replace the valve next week. We will continue to use Rapp-it as it is a very good product.”

Maintenance Supervisor
Global Supply Chain, VIC

RAPP-IT PIPE REPAIR SOLUTION FOR PAINT MANUFACTURING

Rapp-it is suitable for use on corroded fluid lines, water reticulation pipelines and ball valves that are widely used in the paint manufacturing industry.

SCOPE

The customer advised that they had an overhead leak in a 25mm ball valve line. The valve required urgent repair, as the damaged area was leaking Texanol. Texanol is a widely used toxic liquid found in paint manufacturing.



Pipe Substrate	Steel
Pipe Contents	Texanol
Internal Pressure (psi)	116 psi / 800 kPa
Temperature (°C)	25°C – 30°C
Pipe Diameter (mm)	100mm
Damaged Area (mm)	25mm Ball Valve

SOLUTION

The line was shut down and the damaged area was cleaned and roughened. Rapp-it Steel Putty and Rapp-it Pipe Repair Bandages (50mm x 3.6m) were applied over the ball valve line with 5cm tails on each side. The line was up and running at full capacity 30 minutes after application.





MANGANESE ORE WASTE LINE CASE STUDY

RAPP-IT PIPE REPAIR SOLUTION FOR ORE WASTE LINE

Rapp-it is suitable for use most substrates, including poly pipe. This large manganese ore waste line is located in Northern Territory, Australia.

SCOPE

The customer had advised that they had a leak in their waste poly pipe which had been damaged over time. The pipe was spilling waste and mud which caused a safety hazard for workers around the site.

Pipe Substrate	Poly Pipe
Pipe Contents	Waste, Gravel, Mud
Internal Pressure (psi)	Standard Pressure
Temperature (°C)	10°C – 20°C
Pipe Diameter (mm)	500mm
Damaged Area (mm)	50mm

SOLUTION

The customer was able to stem the flow of gravel and waste by using a rubber lining followed by applying several Rapp-it Pipe Repair Bandages (100mm x 4.8m) over the top around the pipe to completely seal the damaged area. By applying Rapp-it, the customer was able to stop the waste leak and work was able to continue which saved thousands of dollars in downtime.



“ Big repair but Rapp-it managed to stem the flow allowing us to continue.”

Maintenance Manager, NT





COAL FIRE POWER STATIONS CASE STUDY



“Could not be better for our product.”
Rapp-it Response Team
Power Station, QLD

RAPP-IT PIPE REPAIR SOLUTION FOR COAL FIRE POWER STATIONS

Rapp-it can be used on air heater, water, slurry, hot ash and chute pipeworks found widely through coal fire power stations. Temperatures can range from 0°C to 140°C.

SCOPE

The customer advised the coal discharge chute had a leak. The coal discharge chute required a replacement however the power station was unable to stop coal handling processes.

SOLUTION

The customer used Rapp-it Steel Putty and applied several Rapp-it Pipe Repair Bandages (100mm x 4.8m) to fix the damaged chute.

This allowed the customer to continue preparing the coal for export until a maintenance shutdown could be scheduled.



Pipe Substrate	Steel
Pipe Contents	Water
Internal Pressure (psi)	87psi
Temperature (°C)	80°C – 140°C
Pipe Diameter (mm)	600mm



IRRIGATION SYSTEM CASE STUDY



“Our pump works at 600kPa and not a drop of water escaped the joint, excellent.”

Maintenance Director
Hervey Bay, QLD

RAPP-IT PIPE REPAIR SOLUTION IRRIGATION SYSTEM

Rapp-it is suitable for use on water pipelines, union and valve that form part of water irrigation systems.

SCOPE

The Customer advised that the glue had failed on a 50mm high pressure union leaving a 35mm long crack. Water was leaking out of the irrigation system causing flooding on the golf course.

SOLUTION

The Customer turns off the water to reduce the pressure and isolate the leak. Using the Rapp-it Steel Putty and a Rapp-it Pipe Repair Bandage (100mm x 3.6m) the customer was able to seal the leak. The customer was successful in repairing the damaged pipe without needing to replace the poly pipe.



Pipe Substrate	Poly Pipe
Pipe Contents	Water
Internal Pressure (psi)	87psi / 600kPa
Temperature (°C)	Ambient
Pipe Diameter (mm)	50mm



GOLD PROCESSING PLANT CASE STUDY



"We are using your pipe repair product almost daily, it's the show on the road."

Maintenance Manager
Boddington, WA

RAPP-IT PIPE REPAIR SOLUTION FOR GOLD PROCESSING PLANT

Rapp-it is suitable on air, water and slurry pipework as well as cyclone feeds and leach lines found widely throughout gold mines.

SCOPE

The customer advised the pipe mainly consisted of water with a small amount of fine ore particles (i.e. gold / copper) that were being sent back to the processing plant after the excess rubbish had been removed. The ore was very abrasive, and a small hole had worn out the pipe before the valve. Shutting down the plant gold plant to replace the pipe would have been costly. Using Rapp-it, the mine could now continue operations until the scheduled maintenance time could be arranged.

SOLUTION

The Customer roughened and cleaned the damaged area of the pipe first before applying the Rapp-it Steel Putty over the hole. Then they applied Rapp-it Pipe Repair Bandage (100mm x 9m) to the pipe before the valve. The Customer was successful in repairing the damaged pipe without having to shutdown the processing facility.



Pipe Substrate	Steel
Pipe Contents	Fine ore particles / water
Internal Pressure (psi)	140-160psi
Temperature (°C)	90°C
Pipe Diameter (mm)	150mm



OIL SANDS MINE CASE STUDY



“Temperatures are testing out here, Rapp-it stands up to the test.”

Maintenance Manager, Canada

RAPP-IT PIPE REPAIR SOLUTION FOR OIL SANDS PROCESSING PLANT

Oil sands are either loose sands or partially consolidated sandstone containing a naturally occurring mixture of sand, clay and water, saturated with a dense and extremely viscous form of petroleum technically referred to as bitumen. These are all very abrasive materials.

SCOPE

Customer advised they had a rupture on a water line 350mm pipe. The customer’s mine was subject to frigid conditions of -26°C.

SOLUTION

The customer shut down the pipe line and then utilised a Herman Nelson heater and sock placed right at the patch location to maintain a moderate temperature. They then cleaned and roughened the damaged area. The leak was stemmed with Rapp-it Steel Putty and Rapp-it Pipe Repair Bandages (100mm x 3.6m) were applied over the top. The line was up and running at full capacity, 30 minutes after application.



Pipe Substrate	Steel
Pipe Contents	Water
Internal Pressure (psi)	87psi/600kPa
Temperature (°C)	Ambient
Pipe Diameter (mm)	350mm



METALLIFEROUS MINES CASE STUDY

RAPP-IT PIPE REPAIR SOLUTION FOR METALLIFEROUS MINES GOLD – NICKLE – COPPER

Concentrator throughput was approximately 25 Million TPA and had 4 main outages per year at 12-week intervals.

The biggest wear issues were in pipes throughout the concentrator as the slurry was very abrasive as with most mining in grinding. Although the pipes were rubber lined and, in some cases, also ceramic lined for the high wear areas, they had the occasional pipe failure of slurry leaking from either a pipe's bend (elbow), flange or valve body.

SCOPE

- 500mm slurry and coarse material piping and valve body leaks were contained and sealed up using Rapp-it Pipe Repair Bandages (100mm x 9m)
- 550mm Tailings pipe line leaks were successfully wrapped and sealed using Linatex rubber and wrapped with many rolls of Rapp-it Pipe Repair Bandages (100mm x 3.6m)
- Cyclone Feed spool and coarse overflow spool repairs using Rapp-it Pipe Repair Bandages (50mm x 3.6m)
- Many airline pipe pin hole leaks were detected at an early stage and wrapped and sealed using the smaller Rapp-it Pipe Repair Bandage (50mm x 3.6m).

SOLUTION

Nearly all repairs above were able to be done on the run by using a wooden stake and driving it into the leaking hole to seal the leak. Cutting off the protruding piece of wooden stake allowed a flat surface to commence wrapping the Rapp-it Pipe Repair Bandages over the area. Once the application was completed, it set as hard as a rock and stopped the leak.

Rapp-it withstands coarse slurry and materials very well, long enough to enable planning for the right replacement.

“Rapp-it has been around for many years as I have been working in mining for the past 28 years and have used their product at every mine I have worked at from Western Australia, New South Wales and South Australia and primarily all been metalliferous mines.

Rapp-it has been used in many applications across all processing plants as an enabler to continue processing until the plant is taken off line to meet a scheduled down time shutdown/ maintenance day. Equipment wrapped with Rapp-It can safely be removed from service and a longer-term replacement can be executed without impacting production.”

Gary Allen
Maintenance Superintendent, NSW





METALLIFEROUS MINES CASE STUDY





THE PIPE REPAIR LEADER

with NATO certification

Rapp-it is a global leader in emergency pipe repairs. Developed to industrial specifications and certified by NATO, Rapp-it is the trusted repair solution for major mining, processing, offshore oil, agricultural and marine companies.

We have continually improved and refined Rapp-it since our inception over thirty years ago. Tested in university laboratories, our products are fully compliant with the GHS, and undergo stringent quality management. We also provide comprehensive technical training, to help you achieve a successful repair on even the toughest projects.

Rapp-it is available from distributors throughout Australia and around the world. Please contact us to find your nearest distributor.

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