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## TRANSDERMAL TAGS PRODUCT SHEET

Transdermal satellite telemetry tags are used worldwide to study cetacean movements and habitat use patterns.

Intended for long-term monitoring of baleen whales, these tags are deployed using a pneumatic air gun or fiberglass pole and are fully implanted in the fascia layer just ahead of the dorsal fin.

The electronic components are cast in surgical-quality stainless steel housing with only the wet/dry sensor and Argos antenna left exposed.



Model:  
SPLASH-302

Wildlife Computers offers several data options:

Tag Type	SPOT-177 (Classic)	SPOT-193 (Classic)	SPOT-303 (Integrated)	SPLASH-302 (Integrated)
<b>Sensors</b>	Temp Light	Temp Light	Temp Light	Depth Temp Light
<b>Data Products</b>	<ul style="list-style-type: none"> <li>Argos Locations</li> <li>Percent Dry Timelines</li> <li>Time at Temp Histograms</li> </ul>	<ul style="list-style-type: none"> <li>Argos Locations</li> <li>Percent Dry Timelines</li> <li>Time at Temp Histograms</li> </ul>	<ul style="list-style-type: none"> <li>Argos Locations</li> <li>Percent Dry Timelines</li> <li>Time at Temp Histograms</li> </ul>	<ul style="list-style-type: none"> <li>Argos Locations</li> <li>Depth &amp; Temperature Time-Series</li> <li>Histograms</li> <li>Dive Behavior Summaries</li> <li>Temperature Profiles</li> </ul>
<b>Life (days)</b>	300	550	300	300
<b>L x W (mm)</b>	114 x 22 114 x 20*	172 x 22 172 x 24*	300 x 24	300 x 24
<b>Weight (g)</b>	185 140*	200 225*	390	390

\* 0.02" thin-walled housings. The thin-wall housings are lighter whereas the standard, 0.06" thick-walls housings have superior strength.

*This is a small representation of our available tags.  
Tag features and specifications subject to change without notice.*

# Transdermal Tags – continued

## Classic Tags

Traditional whale tags include a threaded screw on the base for anchor attachment. Researchers supply their own dart-head, anchor, and delivery system. This allows the dart length and depth of penetration to be customized per project. Wildlife Computers offers several variations of the classic cetacean tag in tubes with two different wall thicknesses.

## Integrated Tags

Wildlife Computers integrated tags include the dart-head and retention umbrellas. These complete tags are now the standard for most humpback and right whale projects. Retention is maintained through two actively sprung flaps and a circle of passively deployed umbrella shaped “petals.” The anchor was originally designed by the Australian Antarctic Division. Wildlife Computers adopted the design in 2012, and has since supplied hundreds of tags for dozens of projects.

## ARTS Delivery System

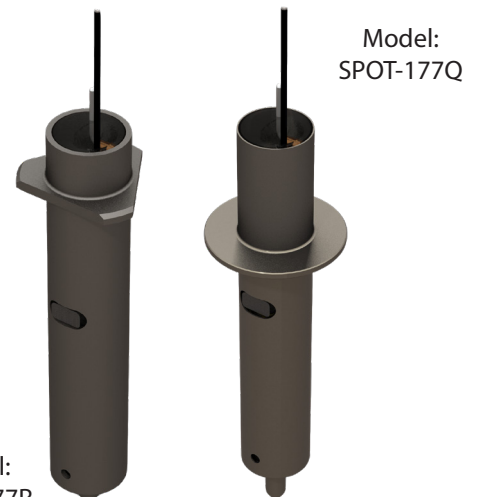
The ARTS launcher is a modified line thrower with variable pressure to suit different firing situations. The cost of the ARTS launcher and filling hose is approximately \$8,000 USD. It can be purchased directly from RESTECH in Norway. Further information can be found at <http://restech.no/product/arts-whale-tagger/>.

## Custom Launching Tube

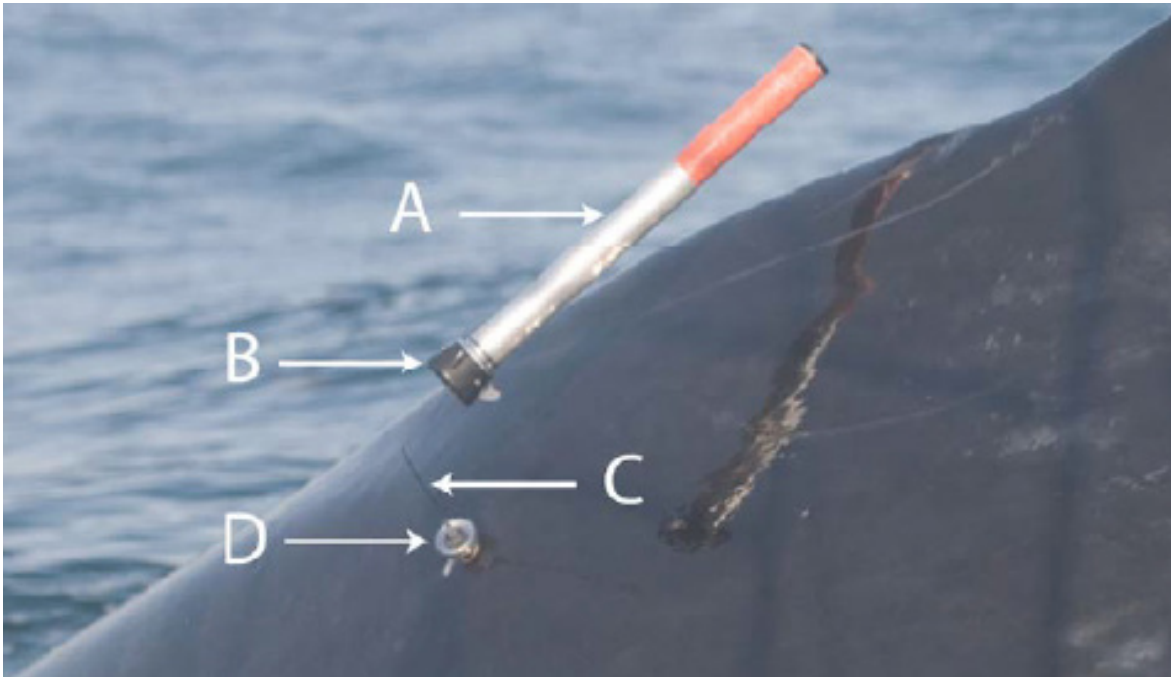
A projectile launching tube may be used for delivery. On firing, the tag and launcher are ejected. The rapid deceleration of the impact retracts the retention teeth from the launcher, separating it from the tag. The tag stays with the animal and the launcher floats for recovery and reuse. The custom launcher tubes are available directly from Wildlife Computers.

## Deployment Collar

An ultra-light aluminum “collar” is used to fix the tag to the launching tube. The collar stays with the tag on deployment and acts as a stopper to ensure the wet/dry sensor and antenna remain external.



# Transdermal Tags – continued



*Deployment of a tag immediately post-implantation showing: A- Launching tube; B- Launching tube attachment mechanism; C - Tag antenna; D - Implanted tag with deployment ring collar. © Nick Gales*

## **Sterilization**

All external components of the tags are built from stainless steel and can be gas-sterilized prior to deployment.

## **Etched Bands**

Etched bands are optional and can be included on the transdermal tag housings. When animals are re-sighted, the etching serves as a guide, allowing the researcher to see if the tag has migrated out of the whale, and if so, by how much. The etching does not affect pricing, however, it does increase manufacturing time.

## **Lead Time**

Please allow 16 weeks for manufacturing and testing.

## **Deployment Duration**

Tag retention is greatly dependent on placement and how flush the tag sits after implantation. Typical deployments run several months, although missions over one year have been achieved.

## **Contact Us**

If you need additional help, feel free to contact us by calling +1 (425) 881-3048 or emailing [tags@wildlifecomputers.com](mailto:tags@wildlifecomputers.com).