

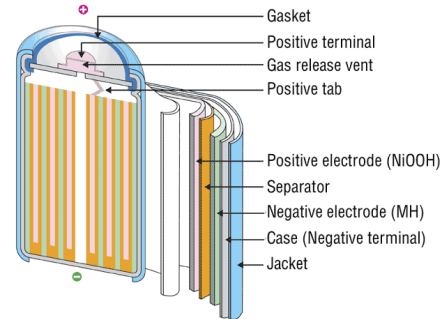
INPUT

## Battery Specification

Name:	<b>Nickel–Metal Hydride Battery</b>
Category:	rechargeable battery
Shape & Size:	cylindrical, mixed sizes
Nominal Voltage:	1,2 V
Energy Density:	60-120 Wh/kg
Anode:	metal hydride (MH) M: AB5 type (most common): A=REE, B=Ni,Co, Mn and/or Al. AB2 type: A=Ti / V, B=Zr / Ni with a little Cr, Co, Fe or Mn
Cathode:	nickel(III) oxide-hydroxide (NiO(OH))
Electrolyte:	potassium hydroxide(KOH) solution, may also have LiOH or NaOH solution
Discharge Reaction:	<b>NiO(OH) + MH -&gt; Ni(OH)<sub>2</sub> + M</b> (opposite direction for charging)
Cell Inner Structure:	spiral



NiMH Battery Sample



Structure

TREATMENT



OUTPUT

Component	Input wt [%]	Output wt [%]	Output Form	Recycling Path	Recycling Efficiency [%]
Iron	21,3 %	21,3 %	pyrolysed cell	stainless steel works	21,3 %
Nickel	29,6 %	29,6 %			29,6 %
Cobalt	3,6 %	3,6 %			3,6 %
Rare Earth Metals	11,1 %	11,1 %			-
Manganese	1,7 %	1,7 %			1,7 %
Chromium	0,8 %	0,8 %			0,8 %
Potassium	2,4 %	2,4 %			-
Others (O, H, C, Li, etc.)	15,6 %	15,6 %	-		
Plastics, Separator (Paper), Water, Organic Binder	13,9 %	0,0 %	pyrolysed gas	thermal use	-

**Total: 100 %**

**86,1 %**

**RE\*: 57,0 %**

\* Calculation according to EU/66/2006 and EU/493/2012